

# A concept analysis of person-centred handover practices: The meaning in emergency departments

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## ABSTRACT

**Background:** Transfer of patients from the prehospital to the in-hospital environment is a frequent occurrence requiring a handover process. Habitually, emergency care practitioners and healthcare professionals focus on patient care activities, not prioritising person-centred handover practices and not initiating person-centred care.

**Aim:** The aim of this concept analysis was to define the concept person centred handover practices.

**Methods:** The eight steps for Walker and Avant's method of concept analysis.

**Results:** Thirty-one articles were included for final review including qualitative and quantitative studies, literature reviews and audits. This concept analysis guided the development of an concept definition of person-centred handover practices between emergency care practitioners and healthcare professionals in the emergency department as person-centred handover practices are those handovers being performed while including all identified defining attributes such as structure, verbal, and written information transfer, interprofessional process, inclusion of the patient and/ or family, occurs at the bedside, without interruption.

**Conclusions:** Results suggested that person-centred handover practices involve verbal and non-verbal interprofessional communication within a specific location in the emergency department. It requires mutual respect from all professionals involved, experience and training, and the participation of the patient and / or family to improve patient outcomes and quality patient care. A definition for the concept may encourage the implementation of person-centred handover practices in emergency departments.

## 1. Introduction

The emergency department (ED) is a complex and busy environment with multiple activities occurring simultaneously to manage a vast variety of patient needs. Patients arrive from the prehospital environment to the ED via their own transport or ambulance with or without family members[1]. Patients arriving via ambulance are assessed and managed in the pre-hospital environment and will require the transfer of information regarding their complaints and initiated treatment[2]. Handover ensures the continuity of patient care with emergency care practitioners often only having one opportunity to this optimally to prevent information loss[3,4]. Handover is an interprofessional process involving at least two professional groups[5] at various intersection points.

## 2. Background

Handover practices in the ED occurs between emergency care practitioners (basic, intermediate, and advanced life support practitioners

providing patient care in the pre-hospital environment) and healthcare professionals (doctors and nurses providing patient care in the ED) upon a patient's arrival in the unit. This is the first intersection point where the transfer of information is crucial to prevent information loss, ensure continuity of care and patient safety[1,5]. Information regarding the patient's main complaint, condition of the patient on scene, the assessment data collected, and interventions performed is included in the verbal and written information being transferred[5].

Handover practices are a frequently performed and highly critical task in clinical practise that protects continuity of care leading to improved patient outcomes and patient safety[6,7]. Handover practices have been defined as the transfer of responsibility, clinical information, and care of a patient from one provider to another[2,5,8]. The optimal transfer of responsibility and accountability during handover have been of importance for many years to ensure patient safety[2,5,9]. Literature suggests the need for structure when performing handovers to ensure the comprehensive transfer of information[2,3,5]. One way of ensuring structure could be accomplished with the use of mnemonics. Various

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mnemonics on the components of a handover is available, such as MIST (Mechanism, Injuries, Signs, Treatment), DeMIST (Demographics, Mechanism, Injuries, Signs, Treatment) and SBAR (Situation, Background, Assessment, Recommendation) to assist providers in the conducting of a handover across different categories of healthcare providers [10].

Furthermore, handover cannot only be structured it should be patient and context specific to include the element of person-centred care [1,11]. Handover should occur at the patient's bedside where the patient can be included and participate in decision making regarding their care and be able to add information regarding their complaints which might have been omitted by emergency care practitioners during handover [12]. The inclusion of patients and/or family in handover practices is seen as a form of person-centred care delivery. Research on handover practices is increasing, yet information on the inclusion of the patient and/or family to move towards person-centred care delivery in the ED remains limited.

Person-centred care has been gaining momentum in healthcare and involves placing the patient at the centre of care delivery [13]. Person-centred care includes listening to patients and/or families and incorporating their values, knowledge, and beliefs into the care provided [14,15]. Patients and/or families can provide valuable information regarding their health and illness. The patient is the only constant factor during handover and, therefore, is a valuable addition in ensuring continuity of care [16]. Person-centred care has been shown to increase patient satisfaction, improve quality of care, and patient safety [12]. The environment in the ED influences the ability of healthcare professionals to provide person-centred care, and deliberate efforts must be made to move towards person-centred care delivery [13]. Handover practices provide an opportunity for the initiation of person-centred care in the ED through the inclusion of patients and/or families in the process.

Despite the available literature on how handover practices should be conducted [3] and the importance of person-centred care in the ED [13], there are limited recommendations on how person-centred handover practices could be established between emergency care practitioners and healthcare professionals in the ED. The concept of person-centred care delivery is still novel to the ED and at the time of conducting the concept analysis no literature could be found on the conducting of person-centred handover between emergency care practitioners and healthcare professionals in the ED. Furthermore, there is also a pause in the literature as to what person-centred handover practices mean. The development of a shared definition of the concept person-centred handover practices could be the first step in developing person-centred handover practices in the ED. The definition could additionally ensure that emergency care practitioners and healthcare professionals could have a shared understanding of the concept which could improve the implementation of such handover practices in the ED. Here we report on the concept definition for person-centred handover practices in the ED.

### 3. Methods

#### 3.1. Purpose of the concept analysis

This paper explores the concept of person-centred handover practices to clarify its meaning and provide an operational definition that can be used in the emergency environment.

#### 3.2. Design

Walker and Avant's [17] eight-step model of concept analysis was used. These steps were selected based on the usefulness of the Walker and Avant model in clarifying the vague concepts customary used by nurses and other healthcare professionals. The steps were used as follows: 1) select a concept, 2) determine the aim or purpose of the analysis, 3) identify all uses of the concept, 4) determine the defining

attributes, 5) identify a model case, 6) describe the additional cases (related, contrary), 7) identify antecedents and consequences, and 8) define empirical referents.

#### 3.2.1. Data sources

Multiple databases for all types of publications were searched, including CINAHL (EBSCO), Google Scholar, MEDLINE (PubMed), and Wiley Online Library. The same Boolean search of the keyword's person-centred, emergency department, and handover practices was carried out between May 2021 and December 2021 on each database using the search string: ('Person-centered' OR 'person centered' OR 'person centeredness') AND ('emergency department' OR 'ED' 'casualty' OR 'accident and emergency unit' OR A&E unit OR 'emergency center'). No online dictionary searches yielded any results for the concept. No restrictions were applied to the literature search, however only articles published in the English language were included. A further manual search of the reference lists of selected articles for additional relevant sources was also performed (view Fig. 1).

Only publications on handover practices between emergency care practitioners and healthcare professionals and person-centred handover practices in nursing and emergency department were included. Duplicate publications and those on general handover practices were excluded.

#### 3.3. Data analysis

Using the Walker and Avant's [17] model of concept analysis, each step was separately analysed in the literature reviewed and discussed in the results section. The last five steps were analysed by 1) identifying all uses of the concept, 2) determining the defining attributes, 3) identifying a model case, 3) describing the additional cases (related, contrary), 4) identifying the antecedents and consequences, and 5) defining the empirical referents. Lastly the final definition for the concept was developed based on the golden standard on what person-centred handover practices would look like in practice. Each article was read by the primary author to first identify the defining attributes, the antecedents, the consequences, and empirical referents. Thereafter the uses of the concept, the model case and the additional cases were derived. Articles was then reviewed by the co-authors for verifying purposes and to complete the coding process. Initially each term was analysed individually on an excel spreadsheet. From there the themes were categorised into antecedents, consequences, attributes, and empirical referents.

## 4. Results

Applying Walker and Avant's [17] model of concept analysis uses of the concept, defining attributes, antecedents, consequences, and empirical referents (view Table 1) were distinguished leading to the final concept definition.

#### 4.1. Identifying all possible uses of the concept in nursing

The concept of person-centred handover practices has not been cited in the existing literature. Most studies have focused on person-centred care and handover as separate entities, furthermore studies on specific handover practices between emergency care practitioners and healthcare professionals in the ED are limited.

#### 4.2. Defining concept attributes

An extensive review of the literature revealed salient characteristics reflecting the most frequently used terms associated with the concept [17]. These terms include *structure* [2,18] *verbal and written information transfer* [2], *interprofessional process* [5,19] *inclusion of the patient and/or family* [14,15], *occurs at the bedside* [12], *without interruptions* [9]. Notably

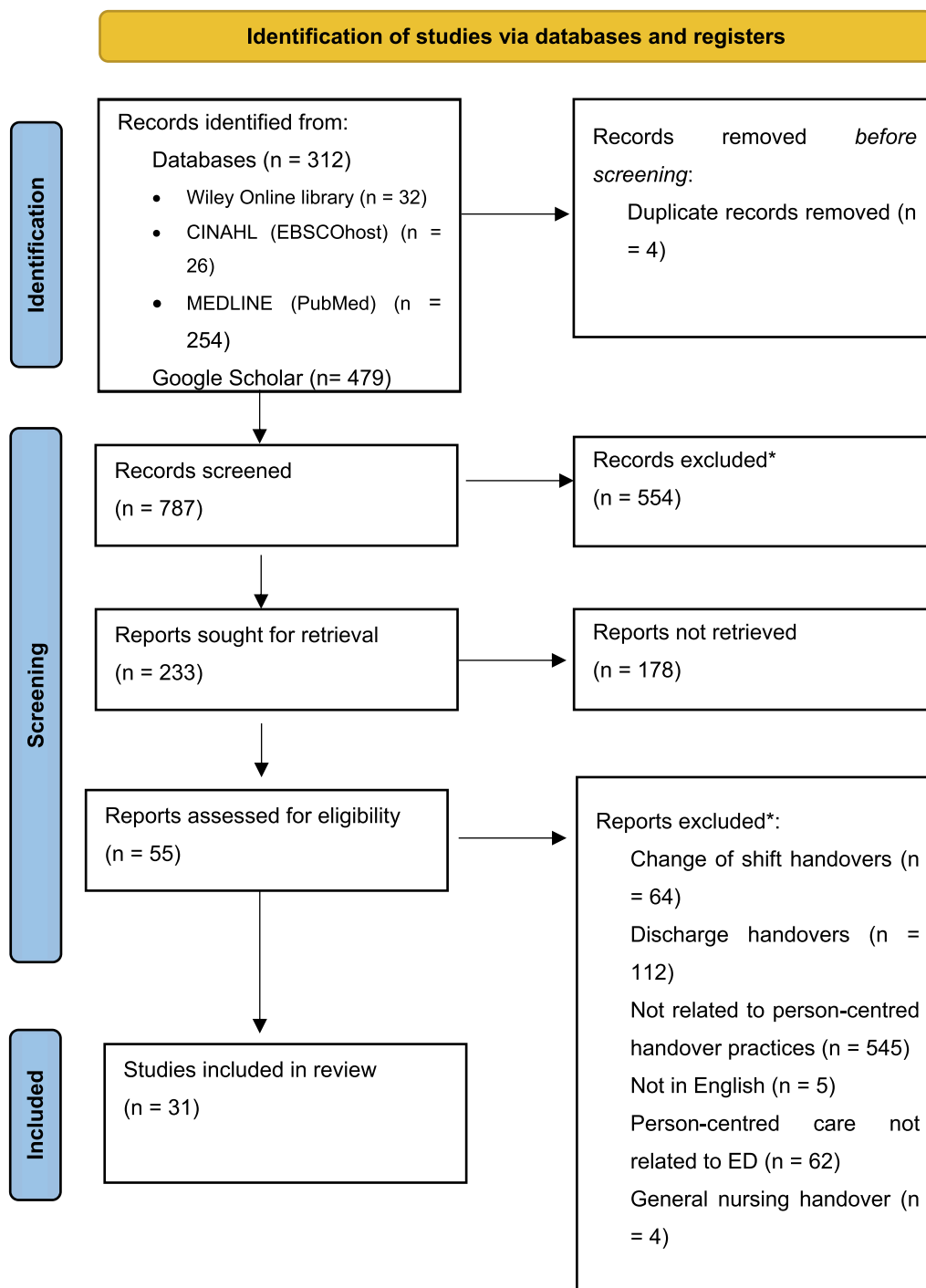


Fig. 1. PRISMA flow diagram – search and retrieval.

the attributes can be divided into two main themes: Person-centredness and handover practices (Table 2).

#### 4.2.1. Structure

Following a specific structure aid in the transfer of all required information [5,19,20] and is required to plan the unique treatment and care for the patient going forward [18,24]. Structured person-centred handover practices are performed in verbal and written format.

#### 4.2.2. Verbal and written information transfer

Handover practices should occur verbally followed by a written document to prevent information loss [24]. Verbal handovers ensures

the transfer of first-hand information upon arrival of a patient in the ED and requires attentive listening from healthcare professionals to prevent information loss [24]. It is during this information transfer process where professionals interact.

#### 4.2.3. Interprofessional process

According to Ehlers et al., (2021) the handover process is an inter-professional process involving at least two different professional groups [5]. The handover between emergency care practitioners and healthcare professionals (nurses and doctors) in the ED is one example of this interprofessional process. The transfer of information during this inter-professional process should also occur without interruptions.

**Table 1**

Summary of the defining attributes, antecedents, consequences and empirical referents, consequences and empirical referents.

Author	Year	Defining attributes	Antecedents	Consequences	Empirical referents
Bagnasco, A., Costa, A., Catania, G., et al	2019	Good communication. Medical diagnosis should be comprehensive and holistic. Communication should be standardized (e.g., SBAR), use of transfer forms during handover to improve communication. Handover should be done verbally. Communicate in a concise and methodical way. Structure = time efficient handovers.			
Bruce, K & Suserud, B.	2005	Information exchange between professionals. Should be done verbally but must also be documented for quality assurance. Should be holistic to meet individual patient needs. Should involve pre-notification which is brief and structured. Handover should be brief. Personnel to listen attentively to handover. Takes place when the patient has either moved on his own onto the ED bed or is lifted from the ambulance stretcher onto ED bed. Effective handover = physical handover of the patient accompanied by verbal account of what happened and handing over any written documents. Contain information regarding how patient was found and the condition, Information transferred should be patient focused and problems clearly stated. The including of the EC nurse + the patient + ambulance nurse. The ED environment (busy, noisy, interruptions) makes these handovers unique. Structure is suggested. Patient-focused process.	Experience (longer the better) for more knowledge on patient treatment. Effective interaction between health care personnel. Done at the patients' bedside. Standardized documentation.	Ideal handover meets patients' needs.	
Ehlers, P., Seidel, M., Schacher, S., et al.	2021	Important type of handover for relaying information on what was done, and plan further care. Involves at least two professional groups - interprofessional process. Structured handovers using ABCDE/SAMPLER. The ED handover requires a specific mnemonic.	Specifically adapted mnemonic to conduct the handover from. No actions to be performed during handover. All team members to be present. Face-face communication. Users of the standardized tool should be orientated to it. Training on the content to be included in the curricula of EMS and ED personnel.	Subsequent treatment depends on the handover. Patient outcomes depend on good handover. Improve patient safety and patient outcomes.	
Kalyani, MN., Fereidouni, Z., Sarvestani, R., et al.	2017	ED environment influences this handover. Done verbally. Must also be documented to provide a formal record. It is an interprofessional handover. Should be done in a specific location. Standardized approach to be followed.	Quiet environment, free from noise and distractions. Necessary knowledge regarding patient transfers. Inservice education on how to perform a handover as well as practice in it.	Ensures continuity of care and patient safety. Effective handover is necessary to achieve optimum management of all patients.	
Dawson, S., King, L., and Grantham, H.	2013	These hand overs are vulnerable (busy, overcrowded, noisy, distracting environment). Occurs between nurses and paramedics mostly - inter-professional transfer of information. Requires effective communication. Structured form of conducting handover. Handover from paramedics to a team should be done to prevent repetition of information and information loss. Should contain baseline information on airway, breathing, circulation, level of consciousness, and changes in condition should be included in a comprehensive verbal handover. Verbal handover should be accompanied by written documentation,	Effective communication. Space to conduct the handover in. Face to face communication. Experience in performing handovers. ED staff should listen actively. Eye contact between team members. Handover training for both paramedics and ED staff, including in-service training. Structured documentation for the written handover.	Effective handover leads to optimum patient management.	
Flynn, D., Francis, R., Robalino, S., et al.	2017	Direct communication with ED clinician. Standardising some aspects of the handover. Generic protocols/checklists should be followed. The use of an adapted MIST tool. Important to	Develop checklists which guides the handover process. Shared respect between the two areas. Training on handover for both sides.	Effective handover will lead to less questions asked for clarification from ED staff and a shorter handover duration.	

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Table 1 (continued)

Author	Year	Defining attributes	Antecedents	Consequences	Empirical referents
Ebben, R., van Grunsven, P., Moors, M., et al.	2015	<p>deliver concise structured information regarding treatment. Eye contact during handover. Structured handover tools to improve communication during handover.</p> <p>Involves two or more professionals. Two-way communication between ambulance crew and ED staff. There is exchange of verbal and/ or written information about the patient's diagnosis, treatment and care. It involves the transition of responsibility. This handover is the only opportunity to transfer information from the ambulance crew. Standardization is important to prevent errors. Structured models include: DeMIST, AMPLE, ASHICE, IMIST-AMBO, SOAP, BAUM and DeMIST. Handover should take place before patient transfer. Ambulance crew should verify if the handover was clear. Handover should be documented while in progress by the ED staff. All involved in patient care should be present at the handover. Information on treatment given and vital signs is important.</p>	Structured models for handover to facilitate standardization. Evidence-based guidelines for the performing of the handover. Training on handover.	Transition of patient responsibility occurs after handover.	
Budd, H., Almond, L. and Porter, K.	2007	Includes information on the mechanism of injury and vital signs. Structured approach such as ASCHICE is used. Involve the whole trauma team. Two-way communication between the EMS and hospital.	Handover protocols and training. Devise a communication pathway for vital information to rapidly be collected and transmitted from scene to the ED in a standardised format.	Facilitates the transition from prehospital care to ED.	
Bost, N., Crilly, J., Wallis, M., et al.	2010	This type of handover is the first physical interface of pre-hospital and ED staff. Involves the transfer of information on the patient's clinical condition and professional responsibility and accountability. Often occurs in a setting with high patient acuity and overcrowding. Includes detailed information given by an experienced ambulance personnel member. Detailed information includes patient problems, incident, patient assessment. It is done in a verbal and written form. Standardised approach e. g. DeMIST. The ideal handover includes clearly stated problems. It involves interprofessional communication.	Requires attentive listening from staff to the handover. Staff should be experienced in handover. Pre-hospital personnel requires training in handover to provide a detailed handover. ED staff to also have knowledge and experience to improve the quality of information received. Flexible structured tools for standardization and which can be adapted to the context of the patient. Use of guidelines to provide uniform information and to improve teamwork.	Detailed handover leads to enhanced patient care. Leads to the transfer of responsibility and accountability.	
Jamshidi, H., Jazani, R., Alibabaei, A., et al.	2019		Adequate space to provide the handover in (physical space), crowded areas influence the adequacy of the handover. Adequate amount of ED staff to attend handover and listen to the handover. Experienced staff improves handover.		
Thakore, S. and Morrison, W.	2001	Should be quick and effective. ED staff to listen attentively to EMS during the handover. One person to listen to the handover and the others treat the patient.	Training of EMS staff. Training in paediatric handovers specifically. Active listening from ED staff to handovers. Process in place of who takes the handover, one person listens while the rest continue with patient treatment.	Handover transfer ensure continuity of care, patient safety and teamwork.	
Meisel, Z., Shea, J., Peacock, N., et al.	2015	Handover should be fast, but clear, effective, and delivered to the right person (ED physician). Most handovers involve the ED nurse and EMS staff. Handovers should be verbal and written. "A critical, brief window (or golden minute) in which EMS staff could influence the course of their patient's hospital-based care". Certain aspects of the verbal handover can be standardized.	Standardizing and automating patient viewpoints and the development of policies. Appropriate staff to be available to handover to. Training of staff on handovers.		

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Table 1 (continued)

Author	Year	Defining attributes	Antecedents	Consequences	Empirical referents
Bost, N., Crilly, J., Patterson, E., et al.	2012	Clear, concise communication between healthcare providers. It should only be done once from EMS to ED staff. No repetition. ED personnel should be listening attentively. Verbal in nature. Information provided to the nurse or team of nurses. Sometimes it is given to the attending doctor. AMIST was used to guide the handover process - Age, MIST). Written report is also provided after the handover, but not referred to during the handover. Ideally handovers should be done to the whole team looking after the patient (nurses + doctor). Using a structured form of handover.	A dedicated area for handover should be available. Good interpersonal relationships between EMS and ED staff. Interdisciplinary education to enhance teamwork. Guidelines regarding the handover process and when transfer of responsibility occur. Correct person available to receive the handover the first time.		
Duason, S., Gunnarsson, B., Svavarsdottir, M.	2021	To use patient handover tools to make the process more structured. Responsibility is handed over after the patient is moved onto the bed. Verbal handover completed and written documentation handed over. One person from each side should be the responsible person for providing and receiving the handover. Handover should be done verbally (face-to-face) and a written report. It should be short, contain structured information, be undisturbed, attention provided - active listening (eye contact) and precise written report should be given.	Persons providing handovers should be trained and professionally competent. Quiet environment. Attentive listening. Collaboration and teamwork.		
Talbot, R. and Bleetman, A.	2007	Structured approach to handover to be used to ensure all information is transferred. Accurate written information should be provided to ensure no information is lost or forgotten. Staff giving and receiving the handover should be familiar with the tool used to ensure retention of information.	Attentive listening. Knowledge regarding tool being used on both sides.		
Jensen, S., Lippert, A. and Ostergaard, D.	2013	Combination of verbal and written elements in the handover. Detailed information should be written down and should correspond with verbal handover. ED staff to listen attentively as to not repeat information and loose information due to repetition. Use of structured tools e.g. BAUM, MIST, IMIST-AMBO, DeMIST. IMIST-AMBO mostly suggested. Standardization of both verbal and written handover. Patient to be included as part of the team for handover. "Handovers are a dialogue between health professionals that also might foster empathy, equity and common ground". The process should include the handing over of responsibility.	Attentive listening. Correct staff member to receive handover the first time.		
Makkink, A., Stein, C. and Bruijns, S.	2021	Structured format that facilitates optimal information transfer. Handover should be provided to the highest qualified person - doctor, with handover provided once and not multiple times to prevent information loss. Providing the handover without any interruptions.	Quiet environment. Correct staff to attend the handover from the start.	Continuity of patient care.	
Makkink, A., Stein, C., Bruijns, S., Gottschalk, S.	2019	Use of mnemonics to guide a structured handover.	Training in providing handovers and the use of mnemonics. Simulation training in handovers.		
Bridges, J., Meyer, J., Dethick, L.	2005	High patient satisfaction rates correlated with having a relationship of trust between patient and ED staff, receiving explanations on why things are being done, being involved in care decisions.	Staff views on including patients in care decisions, developing trust relationships and explanations should be positive for person-centred care to take place. Replacing the focus of moving patients quickly to spending quality time with patients. The	Increased patient satisfaction reported by patients.	Patient experience measurement.

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Table 1 (continued)

Author	Year	Defining attributes	Antecedents	Consequences	Empirical referents
Walker, W. and Deacon, K.	2016	Person-centred care place patients and families at the heart of care decisions. Communicating frequently with families regarding care. Simple term communication to enhance patient and family understanding. Family participation in decision making.	development of an integrated care model to include person-centred in care delivery. Establishing a rapport with families. Developing a trusting relationship with families. Formal education, role modelling, peer support and experiential learning can result in personal development to provide person-centred care. Staff commitment to practice in a person-centred way.	Enhanced care experiences.	Families' verbal expressions of gratitude.
Nicholas, D., Muskat, B., Zwaigenbaum, L., et al.	2020	Person and family centred care portrays 1) dignity and respect (listening to families and incorporating their values, knowledge and beliefs in care), 2) participation (encouraging families to participate in care and decision-making), 3) collaboration (families included in care delivery, institutional policy and programme development), 4) information sharing (sharing of timely, complete and accurate information with families).	Active training and modelling of person-centred and family centred care for staff.		Family satisfaction with regards to communication and interpersonal skills.
Almaze, J. and de Beer, J.	2017	Inclusion of family members in patients' care, to provide information and to be part of care. Providing family members with information - timely accurate information. Inclusion of family members in decision making.	Staff being responsive to the needs, values and cultural needs of pts and family. ED staff should be knowledgeable in person-centred care practices	Reduces family members stress and anxiety and enhances patient satisfaction. Increased staff satisfaction, decrease costs and improve patient outcomes.	
McConnell, D., McCance, T. and Melby, V.	2016	Being cared for with kindness, compassion, and respect. Putting the patient at the centre of care delivery. Care that is relationship-focused, holistic, and collaborative.	Staff attributes include prerequisites: being professionally competent, developed interpersonal skills, committed to the job, clear beliefs and values. Care environment: appropriate skill mix, shared decision-making systems, effective staff relationships, supportive organisational systems, power sharing, the potential for innovation and risk taking.	Satisfaction with care delivery, involvement in care and a feeling of well-being.	
Dellenborg, L., Wikstrom, E. and Anderson, EA.	2019	Seeing the person as a person with their own will, regardless of their physical or cognitive capacity. Patient is free to act and take responsibility for making choices, family members are to be involved in care decisions and decision making to be conducted in partnership with the patient and family members.			
Kennedy, C.	2017	Shared decision making. Incorporating patient's values, belief and cultures into the treatment process. Communication between ED staff, patients and families.	Continuous professional development. ED nurses to realise their role in delivery of person-centred care. Changing ED staff's attitude through training and development to enable them to determine patient's social, psychological, and spiritual concerns at triage. Changing their perspectives from not only lifesaving to holistic care provision.	Increased patient satisfaction and improved health outcomes.	
Brown, K., Mace, S., Dietrich, A., et al.	2008	Treating patients and family with dignity and respect. Patient and family to participate in activities. Communication is an important aspect of family centred care. Family presence during care delivery.	Policies and procedures should be in place providing the principles of person-centred care. Staff to be educated on person-centred care.		
Cohen, E., Wilkin, H., Tannebaum, M., et al.	2013	Providing care that is respectful, individualized to patient preferences, needs and values.		Increase patient satisfaction.	
Shankar, K., Bhatia, B. and Schuur, J.	2014	Where healthcare workers display an attitude in which patients have an active role in their own care. Respect for patient values, preferences and needs.		Improve the patient's overall experience. Enhance the effectiveness of care delivery. Guide clinical decisions based on patients' unique needs.	
White-Trevino, K. and Dearmon, V.	2018	Handover performed at the bedside as this provides healthcare workers the opportunity to connect with patients. Handover where patients are involved		Trusting and caring relationship being formed which results in patients being satisfied with their care.	

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Table 1 (continued)

Author	Year	Defining attributes	Antecedents	Consequences	Empirical referents
Bruce, K. and Suserud, B.	2005	in the handover communication process. When the handover is performed in the patient's presence. Patient is greeted by the staff, and they introduce themselves.			
Kullberg, A., Sharp, L., Johansson, H., et al.	2017	Patient involvement and effective communication. This handover follows a set structure focussing on relevant clinical information, patient safety issues. Patients are involved in the handover occurring at the bedside.		Improved patient safety and nurse and patient satisfaction.	

**Table 2**  
Person-centred handover attributes.

Defining Attribute	Sources
<b>PERSON- CENTREDNESS</b>	
Inclusion of the patient and/or family It occurs at the bedside.	Bruce, K & Suserud, B. 2005[20]; Ehlers et al., 2021 [5]; Kalyani et al., 2017[19]; Dawson et al., 2013[21]; Flynn et al., 2017[18]; Bost et al., 2012 [22]; Makkink et al., 2019[8]; Suján et al., 2014 [7]; Sanjuan-Quiles et al., 2018[8]; Dúason et al., 2021 [2].
<b>HANDOVER PRACTICES</b>	
Structure	Reay et al., 2018[6]; Nicholas et al., 2020[14];
Transfer of verbal and written information	Almaze & de Beer, 2017[23]; McConnell, McCance & Melby, 2016[13]; Dellenborg,
Interprofessional Process	Wikström & Andersson Erichsen, 2019[15];
Without interruptions	White-Trevino & Dearmon, 2018[12].

#### 4.2.4. Without interruptions

Interruptions place handover practices at risk of information loss which could negatively impact patient care delivery. Various studies have indicated that handover practices should occur with minimal to no interruptions[2,3,25].

#### 4.2.5. Occurs at the bedside

Handover at the patient's bedside could reduce interruptions and noise levels and provide an opportunity for healthcare professionals to listen attentively[19,22]. To provide person-centred care patients should be included in the handover and when performing handover at the bedside this could be achieved.

#### 4.2.6. Inclusion of the patient and/or family

Bedside handover gives the patient the opportunity to be part of the handover process providing them the opportunity to provide additional information as required. This can guide the planning of their care and offers them the opportunity to be part of decision-making facilitating person-centred care[12]. The patient is the only constant factor in the whole handover process and could provide valuable information. Person-centred handover practices includes the patient which increases patient and staff satisfaction, enhances continuity of care and improves patient outcomes[12,26].

### 4.3. Constructing cases

Constructed cases are cases that contain all, some, or none of the defining attributes[17] and can help to understand the difference between person-centred handover practices and other similar concepts. The model case refers to a perfect example of the use of the concept, the borderline case contains some but not all defining attributes of a concept, and contrary cases are examples that clearly do not apply to the concept under investigation[17].

#### 4.3.1. Model case

Emergency care practitioners transport the patient to the ED after initiating emergency care. On arrival in the ED, they greet the healthcare professionals on duty, report to the nurse in charge, or the assigned team of healthcare professionals and proceed to take the patient to an assigned bed. The emergency care practitioner provides a verbal handover to the healthcare professional/s in charge of taking over the patient's care. Healthcare professionals listen attentively to the handover at the patient's bedside. The information being transferred is focused on the patient's needs and problems identified, and the treatment provided by emergency care practitioners. The patient and/ or family is involved in the handover process. On completion of the verbal handover, a written document is provided.

#### 4.3.2. Borderline case

Emergency care practitioners transport a patient to the ED. Upon arrival, they greet the healthcare professionals, and all proceed down the corridor. The handover commences prior to arriving at the patient's allocated bed. The handover is interrupted by noise and the multiple ED activities whilst healthcare professionals attempt to listen attentively. In between, the patient and/ or family members asks questions and participates in the handover. Once the patient is transferred onto the ED bed, emergency care practitioners leave and do not provide healthcare professionals with a written copy of the handover. The borderline case contained some of the defined attributes such as verbal information transfer, interprofessional process, and patient and/ or family included, there was interruptions in the process, and it did not occur at the bedside and no written document was provided.

#### 4.3.3. Contrary case

Emergency care practitioners arrive at the ED. They proceed directly to an unoccupied bed and transfer the patient to the bed without reporting to the nurse in charge. No verbal handover occurs resulting in an interruption in the continuity of care. This is an example of a contrary case as none of the defining attributes of person-centred handover practices is present.

### 4.4. Identifying antecedents and consequences of the concept

Antecedents are those events or incidents that must be in place for the concept to occur[17]. Following the analysis of the literature the following four antecedents were identified as having to be present to ensure person-centred handover practices: experienced staff [20,23,27,28], staff trained in person-centred care and handover practices[1,2,5,14,18,19,21–23,27–34], prenotification of the emergency department[20], and assigned healthcare professional/s to receive handover[3,5,22,25,31,32]. Each of the identified antecedents is related to the defining attributes of person-centred handover practices.

#### 4.4.1. Experienced staff

A strong body of evidence suggests that experienced staff perform



person-centred handovers that tend to result in more effective handover practices[21,24]. Experience also results in a more detailed and structured verbal and written handover being performed. Furthermore, the knowledge and experience of healthcare professionals have an impact on the amount and quality of information received[28].

#### 4.4.2. Staff trained in person-centred care and handover practices

The necessary training, role modelling, and peer support is required for the implementation of person-centred handover practices. Activities such as including the patient and/or family, and regular communication between healthcare professionals and the patient and/or family could potentially lead to person-centred handover practices[23,30] and ultimately person-centred care. Training in handover practices is needed to ensure that emergency care practitioners and healthcare professionals are aware of how to do it[5,18]. Handover is a skill that requires both education and practise and can lead to improved patient outcomes and continuity of care[19].

#### 4.4.3. Pre-notification of the ED

Pre-notification of the ED by emergency care practitioners offers healthcare professionals the opportunity to prepare for the arrival of the patient[20,22]. Being prepared will ensure that both a bed and the required staff are available, saving time, and ensuring that person-centred handover practices are being performed.

#### 4.4.4. Assigned healthcare professional/s

Multiple handovers lead to information loss and can be prevented by ensuring that handover is received only once by the healthcare professional/s responsible for patient care[10]. This contributes to the inter-professional communication process and assists with decreasing interruptions during the handover. Additionally, providing the handover to a dedicated healthcare professional or team results in attentive listening further, avoiding repetition and information loss. Therefore, it should be standard practice that once emergency care practitioners arrive in the ED that they report to the nurse in charge and are assigned to a bed and a team (the healthcare professionals responsible for patient care). The handover will occur, and the team receives the verbal handover once.

#### 4.4.5. Consequences

Consequences are outcomes that occur because of the concept[17]. Person-centred handover practices could lead to continuity of patient care from the prehospital environment to the ED and improved patient outcomes resulting in patient and staff satisfaction[14]. The consequences of person-centred handover practices in the ED were identified as: the inclusion of patients and/or families in the handover process resulting in them contributing to their care and being involved in decision making, which results in person-centred care delivery [12,13,23,26,27,30,35–37]. Additionally, following a structured approach to person-centred handover practices can lead to a unique patient-specific care delivery[3,19,28,32], as a form of person-centred care delivery, as all required information regarding the patient will be transferred[28,33,34].

#### 4.5. Defining empirical referents of the model

Empirical referents identify the occurrence of the concept[17]. Being able to measure the occurrence of the concept. Upon the review and analysis of the literature it was determined that person-centred handover practices would be present if one is able to identify components of mutual trust and respect between emergency care practitioners and healthcare professionals during the interprofessional process [2,5,18–22,28,33,34]. When uninterrupted structured [2,3,5,9,18–22,25,31,33,34,38] verbal and written handover practices [2,9,19–22,25,28,31,34,38] occur at the bedside with patient and/or family participation[12,20,26,27,29], it results in patient-focused care

delivery.

### 5. Operational definition

Results from the literature search delineated the concept and its related attributes. The concept analysis was focused on two aspects: person-centred care and handover practices in the ED between emergency care practitioners and healthcare professionals. This concept analysis produced the following theoretical definition of the concept person-centred handover practices:

*Person-centred handover practices are those handovers being performed while including all identified defining attributes such as structure, verbal, and written information transfer, interprofessional process, inclusion of the patient and/or family, occurs at the bedside, without interruption.*

### 6. Discussion

To our knowledge and at the time of the literature review, no definition of person-centred handover practices has been documented in the existing literature. To our knowledge and at the time of the concept analysis no definition of person-centred handover practices have been documented in the existing literature. Person-centred care is defined as an approach to practice, established through the formation and promotion of therapeutic relationships between care providers, patients, and their significant others. The values that underpin person-centred care are respect for people, individual right to self-determination, mutual respect, and understanding.[39]. In a concept analysis by Morgan and Yoder[40], person-centred care was defined as a holistic approach to providing respectful and individualised care, offering individual choice, and allowing negotiation. All existing definitions of person-centred care are based on individual, preferences, a mutual trust relationship, and shared decision making[41–43].

Handover, also referred to as handoff, clinical handover, patient handover, or patient handoff, is defined as the transfer of accountability and responsibility for some or all aspects of care for a patient or a group of patients from one healthcare professional to the next[16]. Literature has indicated the importance of handover practices in the ED and especially between emergency care practitioners and healthcare professionals[9,20]. This handover should be done in a structured, verbal manner to ensure all information related to a patient's assessment and treatment provided in the pre-hospital environment are transferred to healthcare professionals in the ED. Obtaining all relevant information from emergency care practitioners enables healthcare professionals to plan for continued and focused patient care[2,5,20]. Ideally, a team of healthcare professionals (doctors and nurses) who will be responsible for the patient's care should be involved in the handover from the start, to decrease handover repetition and potential information loss[10]. In addition to prevent information loss during handover the handover should be performed in an area with little to no interruptions which could also assist in achieving person-centred handover practices without interruptions. Once the verbal handover is completed a written document should be provided to refer back to once emergency care practitioners has left and so preventing any information loss[19].

The handover process should be person-centred. The inclusion of the patient and/or family is important to achieve person-centred handover practices. By conducting handover practices at the patient's bedside, the patient can be included in the handover process. This offers the opportunity to ask the patient and/or family questions once the emergency care practitioner completed their handover and for the patient to add information not mentioned[12,26]. The findings of this concept analysis propose a formalised definition of person-centred handover practices, the related attributes that should be present during person-centred handover practices and the consequences thereof.

## 6.1. Implications for person-centred handover practices

### 6.1.1. Implications for practice

Handover practices are important to ensure continuity of patient care [1]. Person-centred handover practices can advance person-centred care. Having an operational definition for person-centred handover practices will alert emergency care practitioners and healthcare professionals to what it is and how it is done. This could spill over into person-centred handover practices being performed leading to person-centred care delivery.

### 6.1.2. Implications for education and research

Education and training are important for person-centred handover practices to occur. If emergency care practitioners and healthcare professionals do not receive training on the provision of person-centred handover practices, it will not be implemented and will not be part of their daily practise. Therefore, the concept definition of person-centred handover practices can be used to educate nurses, doctors, and emergency care practitioners in the provision of person-centred handover practices in the ED.

## 7. Strengths and limitations

Having performed the concept analysis, it yielded the concept definition for person-centred handover practices in the ED. At the time of conducting the concept analysis no concept definition existed for the concept person-centred handover practices. The use of Walker and Avant's model ensured that a robust process was followed in developing the final concept definition. Although several databases have been searched, we might still have missed some reports published in the field explored. Selection bias might have also been an issue as reports not published in English were excluded from the final included studies. Additionally, concepts change over time and it is acknowledged that this concept definition might change over time.

## 8. Conclusions

The concept analysis provided the following definition for person-centred handover practices: Person-centred handover practices are those handovers being performed while including all identified defining attributes such as structure, verbal, and written information transfer, interprofessional process, inclusion of the patient and/or family, occurs at the bedside, without interruption. Handover practices are used daily in various healthcare settings, and there are various definitions. The implementation of person-centred care in nursing and specifically the ED are steadily on the increase. This necessitated the need for the analysis of the concept person-centred handover practices. Emergency care practitioners and healthcare professionals should have a shared understanding of the meaning of the concept and be able to differentiate it from other related concepts with the intention to improve patient outcomes.

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## CRedit authorship contribution statement

**Santel de Lange:** Writing – review & editing, Writing – original draft, Validation, Resources, Methodology, Formal analysis, Data curation, Conceptualization. **Tanya Heyns:** Writing – review & editing, Supervision, Methodology, Formal analysis, Conceptualization. **Celia Filmalter:** Writing – original draft, Validation, Supervision, Methodology, Formal analysis, Conceptualization.

## 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.

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