



Wounds Australia 2018

ADVANCING HEALING HORIZONS:
TOWARDS THE CUTTING EDGE IN WOUND CARE



SURGICAL WOUND ASSESSMENT DOCUMENTATION IN VIETNAM

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PhD Candidate

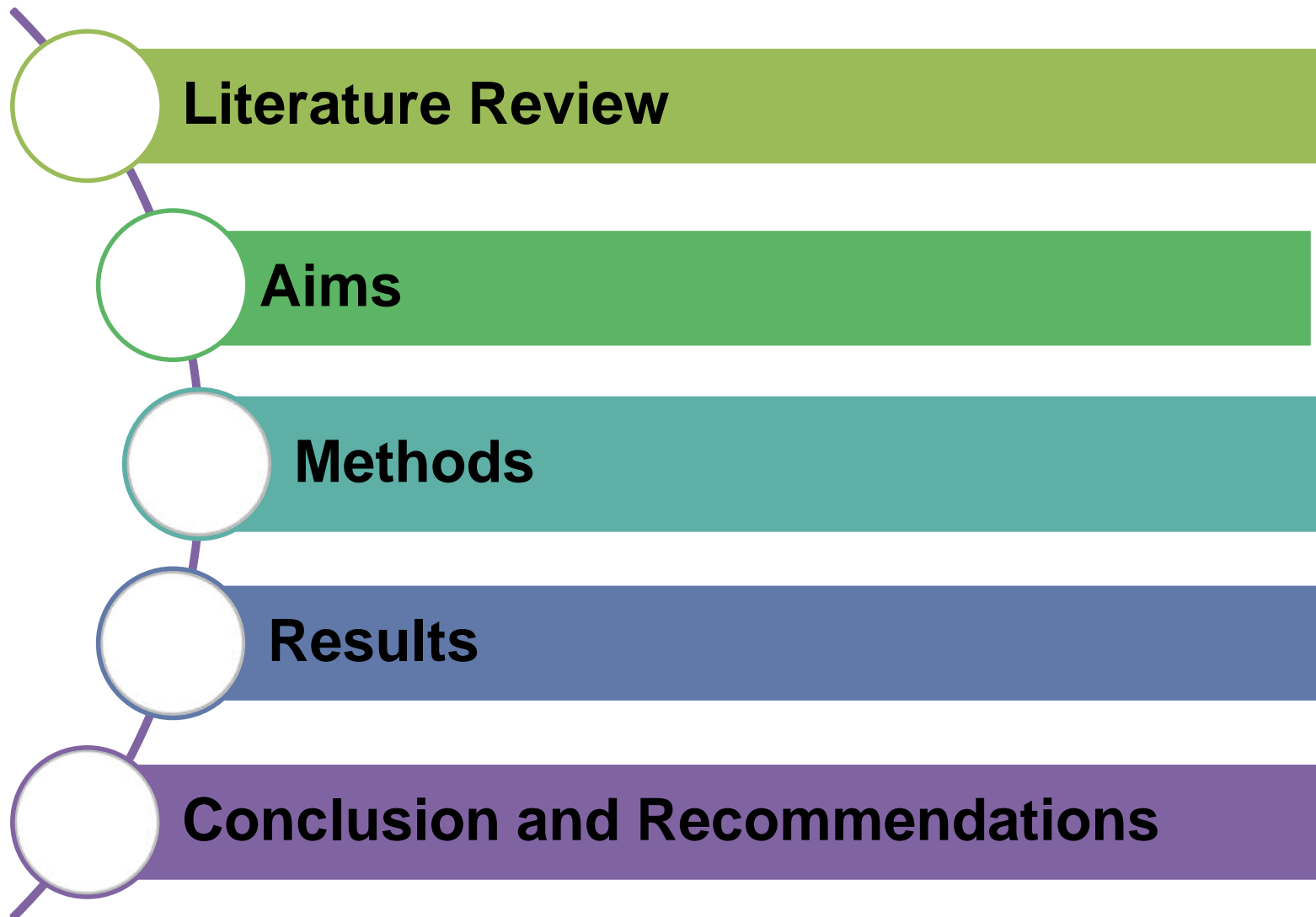


Declaration of Financial Interests or Relationships

Speaker Name: Do Thi Thu Hien

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OVERVIEW



Literature review: Wound Assessment Documentation

STANDARDS FOR WOUND PREVENTION AND MANAGEMENT

Third Edition



STANDARD 5

DOCUMENTATION

Documentation will provide a legal, comprehensive, chronological record of assessments and progress, investigations of the individual's wound and risk of wounding, wound management and/or prevention plans, and the outcome of care.

Rationale

Accurate, comprehensive and chronological health records promote the safety of the individual, continuity of care delivery and ability to determine if the care plan is effectively meeting the goals of care. Maintenance of health records in an accurate and clear manner is a legal requirement that protects the individual, their informal carer and the interprofessional team.

Literature review: Surgical Wound Assessment Documentation

1996 England

A study of postoperative wound management in nursing

Lorraine N Smith, Margaret E Lait

Abstract:

Wound management has changed considerably over the past decade. The change from dry to moist healing is the result of new scientific evidence. The number and variety of wound care products available on the market have increased, along with the importance of the acceptability of a particular type of product to individual patients' attitudes. Annual worldwide expenditure on wound care is estimated to be in the region of £7 billion (USA). The implications of efficient and effective wound healing for both the patient and the economy, therefore, are massive. This article presents the results of a study of postoperative wound management. The need for consistent and regular wound assessment is demonstrated and linked with length of hospital stay.

Wound management is usually considered to be the responsibility of the nursing profession although in reality it is a multidisciplinary concern (Sumas, 1990). Much of the nursing literature is descriptive, with few clinical trials reported and little evidence on the validity and reliability of wound assessment tools used (eg, Johns, 1986; Morison, 1987, 1988; Maher and Woods, 1987; Sutton, 1989; Carroll and Johnson, 1993; Flanagan, 1994).

HEALING AND WOUND MANAGEMENT

Areas of nursing have identified in the literature are wound assessment (Sutton, 1989; Dingley, 1991a; Burdick and Shanks-Smith, 1993), wound measurement (Dingley, 1991b; Dingley, 1991c; Anthony, 1993), dressing choice (Sutton et al, 1990; Sutton and Van Ruyck, 1991; Griffiths, 1991), evaluation of wound progress (Dingley, 1991d) and advocacy of systematic approaches to wound management (Bale, 1991; Griffiths-Jones, 1991; Burdick and Shanks-Smith, 1993).

Wound assessment

Assessment of a wound in the environment in which it occurs is essential for diagnosis, treatment, management and research (Dingley, 1991a; Lenton et al, 1994). Griffiths is a

agreed that there must be systematic, consistent and accurate assessment of patients with wounds (Bale, 1991; Griffiths-Jones, 1991; Flanagan, 1994) which involves the following:

1. Collection of objective information from nursing and medical notes
 2. Patient interviews
 3. Observation and measurement of the wound
 4. Identification and validation of actual or potential problems
- Other areas of assessment include the extent of the wound, blood flow, coagulation, infection, wound characteristics and intervention (Lenton et al, 1994). However, wound infection rates may be higher than reported as the criteria traditionally used to assess the presence of infection, pus or pus with inflammation, may be too narrow to account for the extent of areas in which infection may manifest itself (Laiting and Harding, 1994).

Wound assessment tools

The majority of articles describe a chart or protocol that has been devised so it is one without quantifying its effectiveness. Otherwise, studies are on a very small scale which provides generalisation. Indeed, no wound charts have yet been evaluated rigorously although they are critical devices in a wound-healing knowledge base (Johns, 1986; Maher and Woods, 1987; Morison, 1987, 1988; Sutton, 1989; Carroll and Johnson, 1993; Flanagan, 1994).

Wound measurement and classification

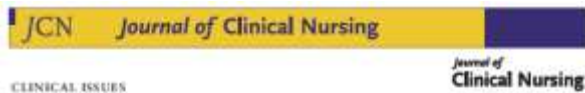
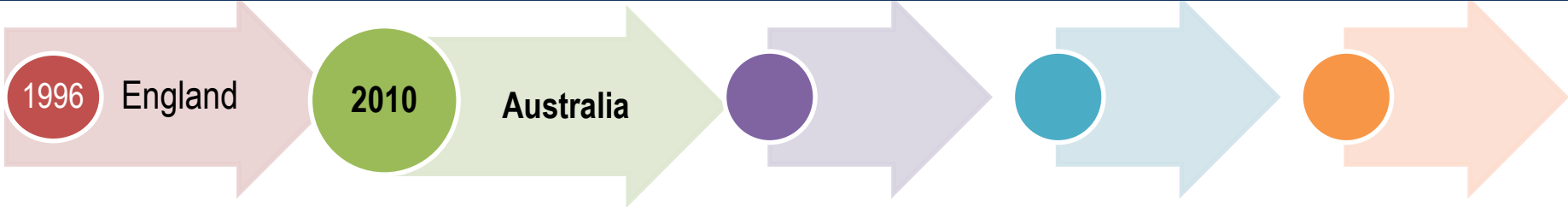
Wound measurement is considered to provide objective proof of wound progress (Dingley, 1991b) as opposed to subjective comments such as 'healing well' or 'wound satisfactory'. Tools for measuring the surface area of a wound are either invasive or non-invasive, depending on the level of intervention required to obtain the data. It should be noted that not all the available wound measurement tools are in routine clinical use.

Retrospective 119 case notes reviewed in one University hospital

Only 19.3% contained wound assessment sheet

89.7% poor documentation

Literature review: Surgical Wound Documentation



CLINICAL ISSUES

An audit of the adequacy of acute wound care documentation of surgical inpatients

Jan Garland, Anne Smith, Sue Clement, Denise Walsh, Ann Tomlinson-Smith, Lory Elias and Andrew Robinson

Aims and objectives: This study examined the degree to which acute wound care documentation by doctors and nurses meets the standards set in the Australian Wound Management Association guidelines, focusing on clinical history with regard to the wound, wound characteristics, evidence of a management plan and factors such as wound pain.

Background: Wound care documentation is an important component of 'best practice' wound management. Evidence suggests that wound documentation by hospital staff is often ad hoc and incomplete.

Design: Survey.

Method: An audit of acute wound care documentation of inpatients admitted to a surgical ward was conducted in 2006 using the progress notes of 49 acute inpatients in a regional Australian hospital. The audit focused on wound documentation on admission and during dressing changes.

Results: The findings demonstrated that, whereas doctors and nurses documented different aspects of the wound on admission, three quarters of patients had no documentation of wound margins and over half had no documentation of wound dimensions, exudate and wound bed. Whereas 122 dressing changes were documented by nurses and 103 by doctors, only 73 (60%) were reviewed by both medical and nursing staff. Doctors and nurses tended to document different aspects of dressing changes; however, in more than half the cases, there was no documentation about wound bed, margins, exudate and state of surrounding skin, whereas wound dimensions and skin sensation were recorded in less than 5%.

Conclusion: Wound care documentation by doctors and nurses does not meet the Australian standard. The findings suggest there is ineffective communication about wound care in the multidisciplinary setting of the hospital.

Relevance to clinical practice: The article concludes that hospitals need to engage medical and nursing staff in collaborative processes to identify the issues that impede poor wound documentation and to implement interventions to ensure best practice is followed.

Key words: audit, documentation, medical records, medical staff, nursing staff, wound care

Accepted for publication: 24 March 2008

Introduction

Accurate wound assessment and wound documentation by medical staff is central to effective wound management and best practice (Stirling 1998, Bicknell & Taylor 2003). Wound

care is commonly a multidisciplinary concern, although it is often seen as a nursing responsibility (Lair & Smith 1999). Overseas research suggests that wound documentation in progress notes is generally poor (How & Jones 1996, Stirling 1998, Buckland & McNicholas 1999, Bicknell 2002, Bicknell

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2307

❖ Audited 49 acute notes inpatients in a regional Australian hospital

❖ No documentation about wound bed, margins, exudate and state of surrounding skin

❖ Wound dimensions and skin sensation were recorded in less than 5%.

Literature review: Surgical Wound Documentation

1996

England

2010

Australia

2014

Queensland
Australia

JCN Journal of Clinical Nursing

ORIGINAL ARTICLE

Postsurgery wound assessment and management practices: a chart audit

Brigid M Gillespie, Wendy Chaboyer, Evelyn Kang, Jayne Hewitt, Paul Nieuwenhoven and Nicola Minley

Aims and Objectives. To examine wound assessment and management in patients following surgery and to compare these practices with current evidence-based guidelines for the prevention of surgical site infection across one healthcare service district in Queensland, Australia.

Background. Despite innovation in surgical techniques, technological advances and environmental improvements in the operating room, and the use of prophylactic antibiotics, surgical site infections remain a major source of morbidity and mortality in patients following surgery.

Design. A retrospective clinical chart audit.

Methods. A random sample of 200 medical records of patients who had undergone surgery was undertaken over a two-year period (2010–2012). An audit tool was developed to collect the data on wound assessment and practice. The study was undertaken across one healthcare service district in Australia.

Results. Of the 200 records that were randomly identified, 152 (76%) met the inclusion criteria. The excluded records were either misread or did not involve a surgical incision. Of the 152 records included, 87 (57.2%) procedures were classified as 'clean' and 106 (69.7%) were elective. Wound assessments were fully documented in 63/152 (41.4%) of cases, and 19/152 (12.5%) charts had assessments documented on a change of patient condition. Of the 15/152 (9.9%) patients with charted postoperative wound complications, 4/13 (26.6%) developed clinical signs of wound infection, which were diagnosed on days 3 to 5.

Conclusions. The timing, content and accuracy of wound assessment documentation are variable. Standardising documentation will increase consistency and clarity and contribute to multidisciplinary communication.

What does this paper contribute to the wider global clinical community?

- There is inconsistency and variation in the occasions when wound assessment is documented.
- Inconsistently coded wound classifications suggest the need for additional education of operating room clinicians in the CIP guidelines on wound classification.
- Contextual influences on work environments that act as barriers and enablers to guideline use need to be identified in collaboration with key stakeholders.

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❖ Audited 200 medical records

❖ Nearly 60% wound assessment were not fully documented

Documentation



practice

Nurses' practice in preventing postoperative wound infections: an observational study

Objective: Surgical site infections (SSIs) are serious postoperative complications that may lead to undetected patient outcomes. Previous research has used survey and chart audit methods to describe wound care practices. However, little research has been published using contemporaneous observations to describe the surgical wound management practices of nurses. The aim of this study was to prospectively describe surgical nurses' postoperative wound care practices and the extent to which observed surgical wound practices aligned with evidence-based guideline recommendations.

Methods: In this cross-sectional prospective study, we observed a convenience sample of 55 nurses from four surgical units using a specifically developed observational audit tool. Intra-rater reliability for this tool was assessed during the observation period.

Results: Of 60 observed episodes of wound care, post-procedure hand hygiene ($n=43$, 81.7%) was less evident compared with pre-procedure hand hygiene practice ($n=57$, 95%). Over one-third of nurses observed did not correctly use clean gloves ($n=16$, 38.1%) and one in

the did not properly use sterile gloves ($n=4$, 20%). More than half of surgical nurses ($n=37$, 61.7%) did not educate patients on post-discharge wound management. Fewer than a quarter ($n=14$, 23.3%) of wound care events were recorded on both wound assessment charts and patients' progress notes. Intra-rater reliability testing indicated good agreement (intra-class correlation coefficient 0.850, 95% CI: 0.775–0.923; $p=0.0009$).

Conclusion: Despite surgical wound care guideline recommendations on aseptic technique compliance, patient education, wound assessment and documentation practices, there is a clear gap between recommended and observed wound care practice. This study highlights an area where clinical practice is not reflective of evidence-based recommendations, suggesting that to minimize SSI as an adverse event, practice should be evaluated and strategies

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surgical wounds • observations • clinical practice guidelines • aseptic technique • chart audit • education

Surgical procedures have been performed for decades to treat a diverse range of conditions and the number performed is expected to rise.¹ In the US, about 16 million surgeries were performed in acute care hospitals in 2009.² In France, it is estimated that about seven million surgical procedures are performed annually.³ The majority of these procedures result in wounds that heal by primary intention, that is, where the wound is sutured, glued or stapled so that the edges are closed directly, leaving a minimal, cosmetically acceptable line.⁴ There are a number of risks associated with surgical procedures, including surgical site infections (SSIs).⁵ In the US, SSIs are the most common surgical procedure complication, with an estimated 1.5 million surgical procedures will experience an SSI defined as any surgical infection taking place within 90 days after a

surgical operation or within one year of surgical implantation of prosthesis or foreign body.⁴

SSI is a major contributor to overall health-care-associated infections (HAI) worldwide. In the US, the Centers for Disease Control and Prevention (CDC) prevalence survey claimed that around 157 500 SSI were associated with inpatient surgery in 2011.¹ This was the most common HAI responsible for 31% of all HAI among hospital admissions in the US.² In France, it has been estimated that the incidence rate of SSI is around 100–200 per 100 surgical procedures, with the incidence of SSI in developing countries is significantly higher than proportion documented in developed countries.³ While urinary tract infection is the most common HAI in developed countries, SSI is the most common infection—affecting up to one-third of surgical patients—in developing countries where resources are limited, and it has an incidence rate nine times higher than that of developed countries.⁴ According to a systematic review and meta-analysis of the literature, the incidence of SSI in developing countries, such as Africa, the Eastern Mediterranean and South East Asia, SSI occur at 5.6 per 100 surgical procedures and for two decades has been the most

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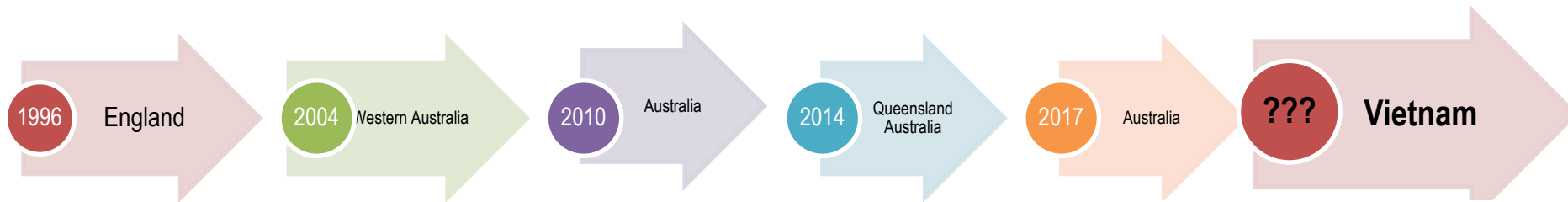
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- 60 episodes of wound care were observed

- Only 23.3% of wound care events were recorded

- 93.3% wound exudate was documented

Knowledge gap



No evidence of wound assessment documentation in Vietnam

Lack of research on nurses' perception on nursing documentation

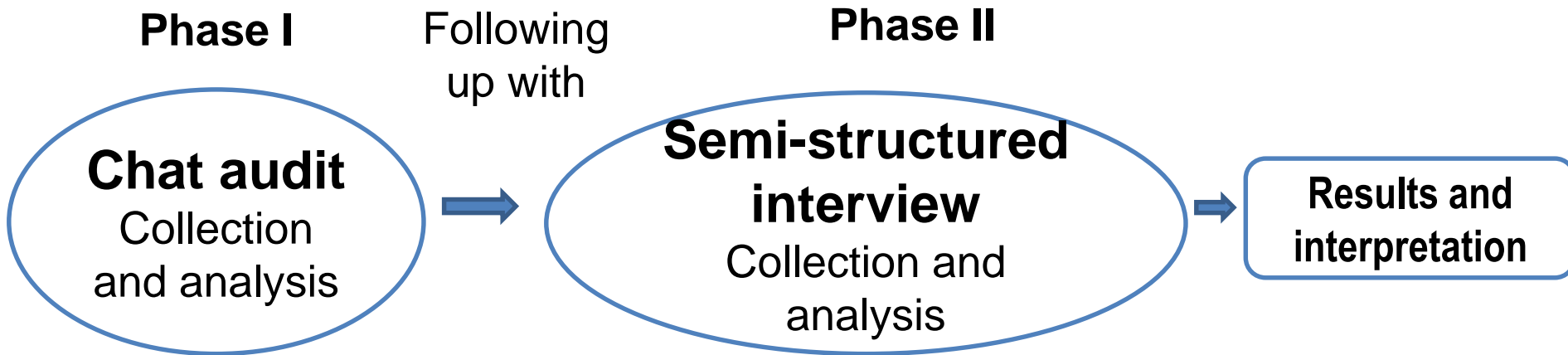


Aims

- Determine the extent to which surgical wound assessment documentation in Vietnam meets international guidelines
- Nurses' perception on factors constraining adequate nursing documentation

METHOD

A two-phase sequential exploratory mixed methods



Phase I: Retrospective chart audit

Used
standard
guideline



Chart audit
instrument

Randomly
selected
200 charts

Analysis
data

Inclusion criteria

- All patients who underwent elective or emergency surgery

Exclusion criteria

- Patients who have had endoscopic procedures
- Patients with wounds related to donor sites, skin grafts, and pin sites.
- Patients admitted with chronic wounds

Phase II: Semi-structured interview

**Recruited 13
surgical nurses**



**30 minutes
Individual
interview**



Data analysis
Inductive qualitative content
analysis presented by Elo and
Kyngäs (2008)

Exclusion criteria

- Working at surgical wards
- Graduated from 2, 3, and 4 years nursing programs.
- Have at least 12 months experience in surgical field.
- Have the ability to communicate in Vietnamese.

METHOD

Ethics approval:

- QUT approval number : 1600000367
- The Acceptance Letter for data collection from Haiduong General Hospital

Setting:



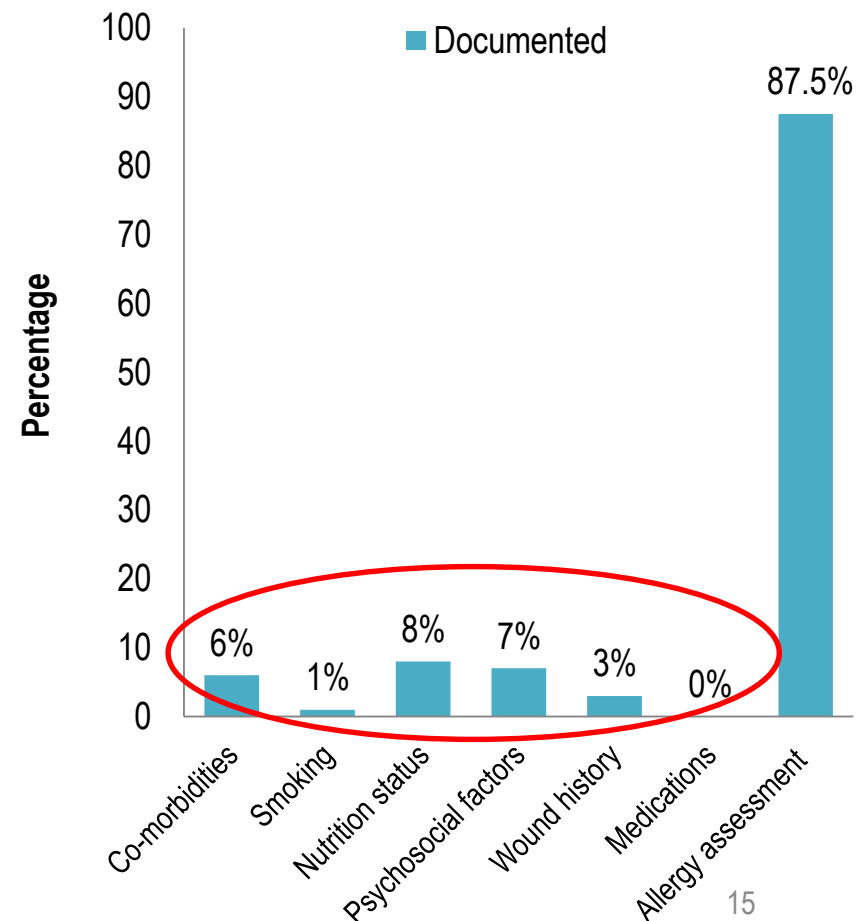
- The largest public hospital in Haiduong Province, with 23 wards and 1000 beds
- Surgical wards:
 - Total 300 beds for inpatients
 - Approximately 600-800 of emergency and elective operations/month.

RESULTS: Chart Audit Pre-op

Patients' demographics (n=200)

Demographic characteristics	Values	Frequency (%)	
Gender	Male	133	(66.5)
	Female	67	(33.5)
Surgery performed	Elective	125	(62.5)
	Emergency	75	(37.5)
Type of surgery performed	Orthopaedics	87	(43.5)
	Abdomen	57	(28.5)
	Kidney	56	(28)
		Median	Range
Age (years)		48	2-89
Hospital length of stay (days)		11	2-49
Preoperative period (days)		2	0-23
Number of different nurses do assessment before operation		3	1-14

Documentation of patients' factors related to wound healing assessed before operation (n=200)



RESULTS: Chart Audit post-op

Day of operation	Day 1 (n=200)	Day 2 (n=191)	Day 3 (n=173)	Day 4 (n=155)	Day 5 (n=141)
Surgical wound characteristics	n(%)	n(%)	n(%)	n(%)	n(%)
Wound location	0	0	0	0	0
Wound dimension	0	0	0	0	0
Wound bed (secondary intention)	0	0	0	0	0
Peri-skin (swelling)	29 (14.5)	47 (24.6)	49 (28.3)	35 (22.7)	30 (21.3)
Volume of exudate	187(93.5)	175(91.6)	152(87.9)	145(93.5)	128(90.8)
Type or colour of exudate	18 (9)	12 (6.3)	3 (1.7)	5 (3.2)	3 (2.1)
Odour	0	0	0	0	0
Pain	83 (41.5)	57 (29.8)	36 (20.8)	21 (13.5)	18 (12.8)
Temperature	100 (100)	100 (100)	100 (100)	100 (100)	100 (100)

RESULTS: Semi-structured interview

Nurses' perceptions on factors constraining adequate nursing documentation

**Unimportance of
nursing
documentation**

**Difficult to
change existing
practice**

Personal factors

RESULTS: Semi-structured interview

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Personal factors

RESULTS: Semi-structured interview

Nurses' perception on factors constraining adequate nursing documentation

Unimportance of nursing documentation

Less usage of medical records to get information

- *".. I am not often reading other nurses documentation to get information because information is minimal in patients charts. If I take care of patients, I would prefer to check and assess patients by myself (participants 10).*

Uninterested in recording

- *"...on long stay patients, repeated recording of the same information is boring..." (Participant 2)*

Too lazy to record

Existing belief that documentation is useless

Doctors' records being more important than nurses' documentation

- *"sometimes patients charts were checked by the hospital, but it mainly focus on doctor's documentation and less concern on nurses documentation. Therefore, nurses do not pay attention on recording " (Participant 9).*

RESULTS: Semi-structured interview

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RESULTS: Semi-structured interview

Nurses' perception on factors constraining adequate nursing documentation

Difficult to change existing practice

**The habits of
recording**

**Shortage
of time**

**Less value of
patients'
chart in
handover**

**Less value of
teamwork**

**Recording
practice**

RESULTS: Semi-structured interview

Nurses' perception on factors constraining adequate nursing documentation

Difficult to change existing practice

The habits of
recoding

Shortage of
time

Less value
of patients
chart in
handover

Less value
of teamwork

Recording
practice

"Since I started working in the hospital, I followed peer nurses' recording. Everyone documented the same, so I followed their recording style"
(Participant 12)

RESULTS: Semi-structured interview

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Difficult to change existing practice

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Shortage
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Less value
of patients
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Less value
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Recording
practice

“... we do not have much time for recording due to too many patients, shortage of nurses and heavy administrative tasks,” (Participant 12)

RESULTS: Semi-structured interview

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The habits of
recoding

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Less value
of patients
chart in
handover

Less value
of teamwork

Recording
practice

“...Normally, we do not handover patients when finishing our shift except for patients with severe illness, we do only verbal handover” (Participant 5)

RESULTS: Semi-structured interview

Nurses' perception on factors constraining adequate nursing documentation

Difficult to change existing practice

The habits of
recoding

Shortage of
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Less value
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Less value
of teamwork

Recording
practice

“nurses may think that they understand factors affecting wound healing, know how to take good care of the patient and that is enough for good recovery of patients. They do not need other nurses to understand about what they do. Thus they don't need to record everything that they do for patient. This is a normal issue for everyone here.”(Participant 2).

RESULTS: Semi-structured interview

Nurses' perception on factors constraining adequate nursing documentation

Difficult to change existing practice

**The habits of
recoding**

**Shortage of
time**

**Less value
of patients
chart in
handover**

**Less value
of teamwork**

**Recording
practice**

"we only documented abnormal symptoms. If patients do not have any problems, we would not record in patients chart"(Participant 2)

"there are limitations in our recording, we only focus on the incision and do not record factors associated with wound healing" (Participant 5)

"I take care of patients in my room every day, and I remember everything about them in my mind, so don't need to record "(Participant 10)

RESULTS: Semi-structured interview

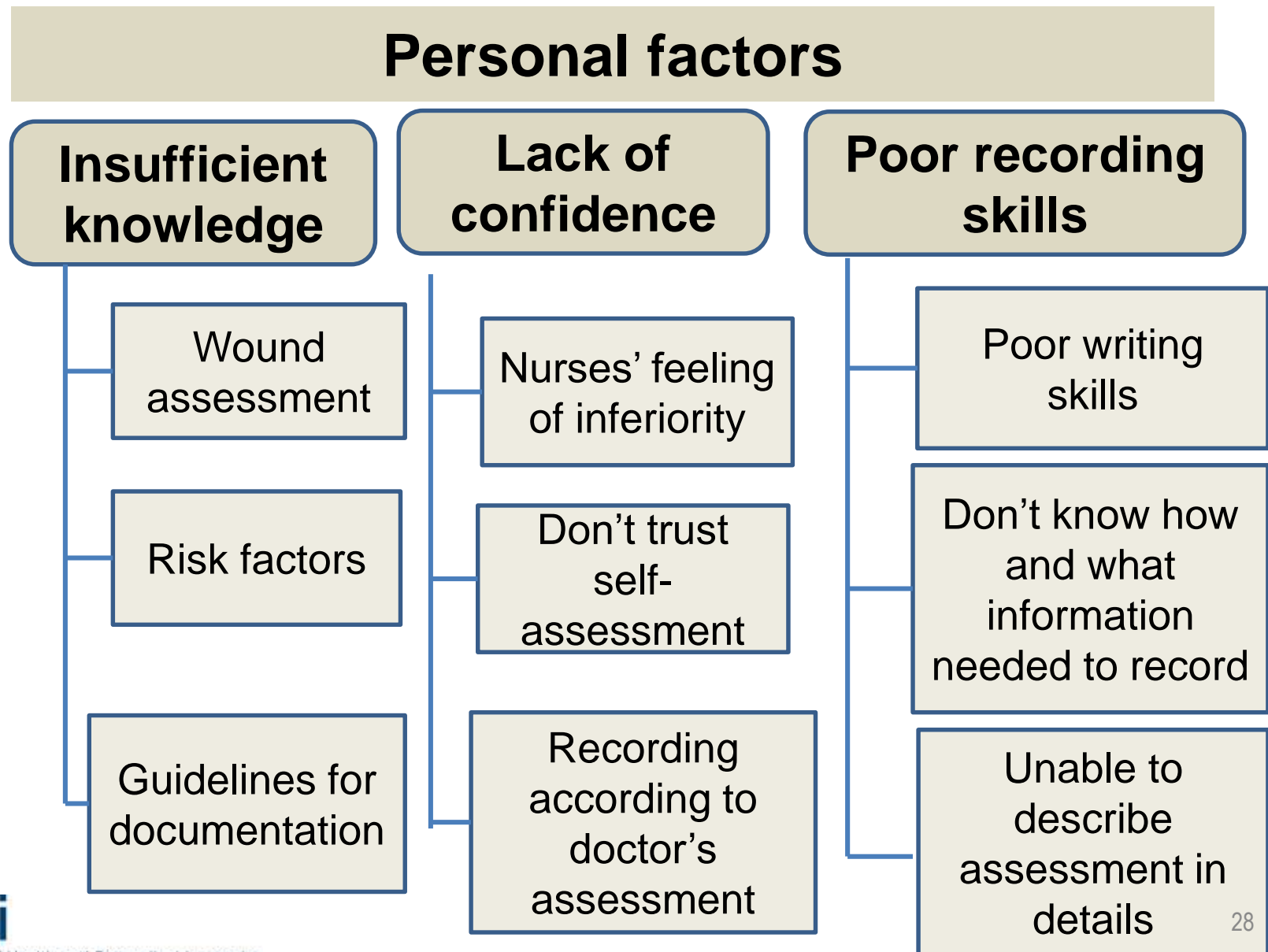
Nurses' perceptions on factors constraining adequate nursing documentation

**Unimportance of
nursing
documentation**

**Difficult to
change existing
practice**

Personal factors

RESULTS: Semi-structured interview



CONCLUSION

- Surgical wound assessment documentation in Vietnam did not meet standards of Wounds Australia.
- Perceptions of lesser value of nursing documentation, difficulties to change existing practice, and insufficient knowledge are factors constraining adequate nursing documentation.

RECOMENDATIONS

- A structured wound assessment tool is needed to assist nurses to record information in a systematic way.
- Improving nurses knowledge on wound assessment may be closed linked to enhance the quality of wound assessment documentation.

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❖ **Participants**

*Thank
you*

