

# **Work-Related Stress & Well Being in Critical Care Nurses: Findings of an Integrative Review**

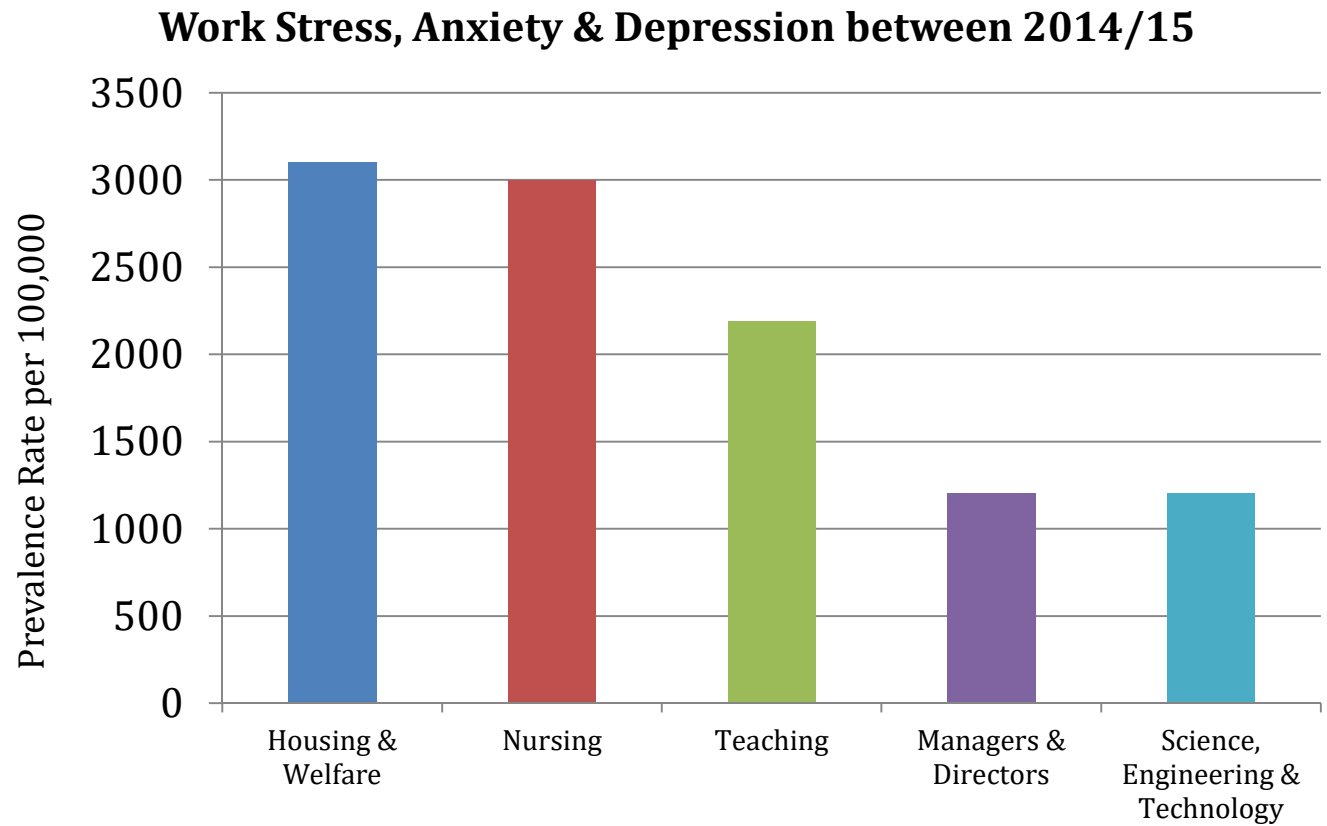


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# Is Work-Related Stress a Problem for Nurses?



(Health & Safety Executive 2015)

# Is Work-Related Stress A Problem for CCNs?

## The Psychological Stresses of Intensive Care Unit Nursing

(1972)

Donald Hay, MD and Donald Oken, MD

Work in the ICU provides formidable stresses for nursing personnel. A major problem is the repetitive exposure to death and dying, posing threats of object loss and personal failure. Defensive distancing techniques support continuing function but raise secondary adaptive problems. The impossible work overload and lack of gratification from obtunded patients add to the problems of maintaining self-esteem. The special nature of the work promotes communication breakdowns with physicians, relatives and nursing and hospital administration, leading to lack of support from these crucial groups—indeed added stress. The necessity for intimate cooperation leads to intragroup tensions. These and similar factors are examined in terms of their psychological and interpersonal demands and the adaptive maneuvers to which they give rise. From an analysis of these, measures are suggested for the structural, procedural and administrative improvement of the ICU; the role of a liaison psychiatrist is discussed.

## STRESSES ON THE NURSE IN AN INTENSIVE-CARE UNIT (1969)

*Ruth Vreeland, R.N. and Geraldine L. Ellis, R.N.*

Stresses identified in this communication are those observed in nurses assigned to a four-bed unit in the Clinical Center, National Institute of Health, Bethesda, Md. This intensive-care unit (ICU) is designed to facilitate the recovery of individual patients after general and radical surgical procedures, but not open-heart or neurological operation. Most of the surgery has been done because of cancer often following prior extension but unsuccessful attempts at curative radiation. Radical procedures for cancer included head and neck dissection, pelvic exenteration, hemipelvectomy, and thoracic surgery. The length of patient stay in the unit varied from a few hours to as long as five weeks.

Stresses experienced by nurses in this setting have been, with minor variations, comparable to those found in most intensive care units.

pressures within the environment. The stresses in the minute-to-minute, day-by-day contact with patients whose lives depend upon the nurse's knowledge, alertness, and skill are compounded by problems encountered in working with a wide range of technical equipment purported to be lifesaving or laborsaving or both. Moreover, maintaining smooth working relationships and effective communications with many different members of the health team and visitors moving through a relatively small physical space creates other tensions.

In order to care effectively for each patient as an individual, the nurse here must have a thorough knowledge of many illnesses and of pertinent personal facts about the individual. She must be attuned to the needs of the short-term acutely ill, postoperative patient as well as to those of the seriously ill patient who remains on the unit through several weeks.

# Integrative Literature Review

## Questions - 1

1. For CCNs, how is work-related stress conceptualised and defined?
2. With reference to CCNs, what factors are associated with perceptions of work-related stress for CCNs? Including:
  - (a) Individual/personal characteristics;
  - (b) The work environment; and
  - (c) Job characteristics
3. With reference to CCNs, what are the consequences of work-related stress for the:
  - (a) Individual?
  - (b) Team?
  - (c) Organisation?
  - (d) Patients?

# Integrative Literature Review

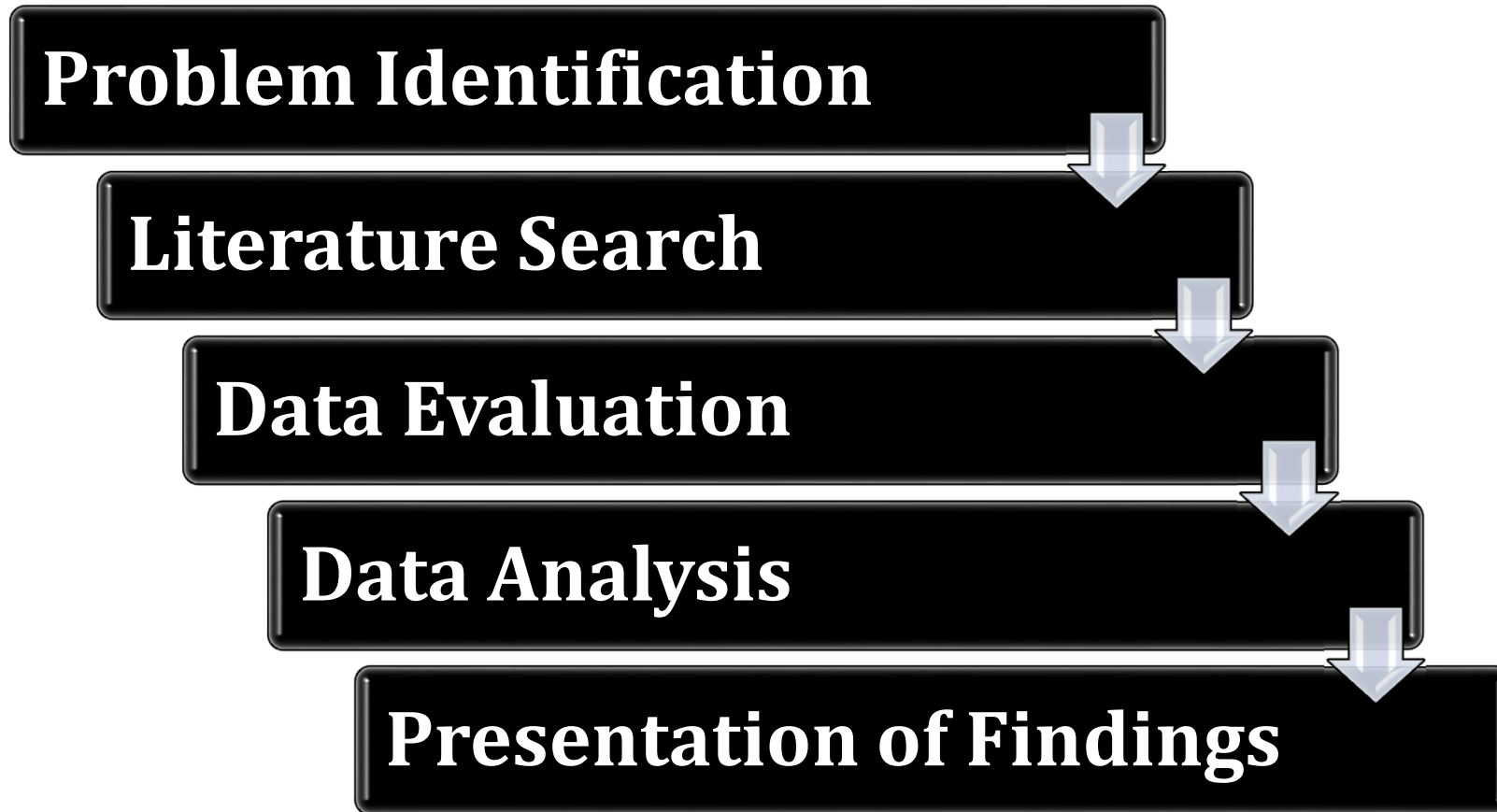
## Questions - 2

4. What are the factors which moderate and/or mediate the effects of work-related stressors on:

- (a) Individual nurse well-being?
- (b) Performance?
- (c) Patient safety?
- (d) Team functioning?
- (e) Organisational outcomes?

5. Is there a relationship between patient safety and CCN work-related stress and well-being?

# Integrative Literature Review Framework



(Whittmore & Knafl 2005)

# Integrative Literature Search - Method

- **Search Strategy**

- June 2014 to Sept 2014

- Electronic Databases included: EBSCO Collections (CINAHL Plus, MEDLINE, PsycINFO, Psychology & Behavioural Sciences Collections, Health Business Elite, Info Science & Technology Abstracts, eBook Collection); EBSCO HOST; Web of Science.

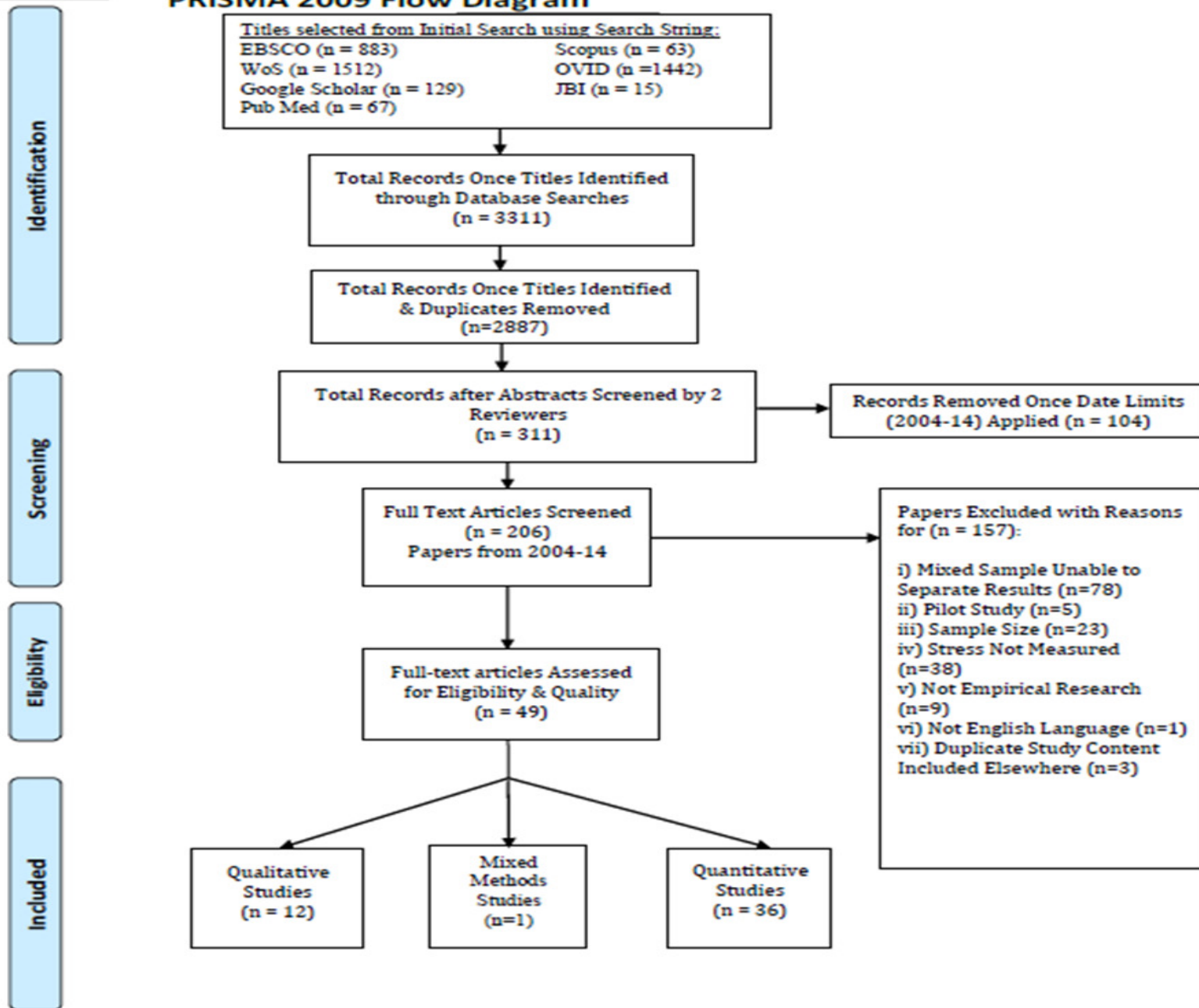
- PICO acronym used.

- **Inclusion/Exclusion Criteria Set**

- Adult CCNs only



## PRISMA 2009 Flow Diagram





# Results - Descriptive Data

- **Papers of Limited Quality:**

QATSDD Scores: Mean = 64%; Range = 36%-92%

- **From 20 Different Countries, including:**

Pan European (n=2);

USA (n=22);

South Africa (n=3);

Netherlands (n=4).

No Scottish Studies.

- **Studies Predominantly Descriptive, Observational Design (n=39)**

# 1. How is Work-Related Stress Conceptualised in CCN Studies?



## 2. What Factors are Associated with Work-Related Stress in CCNs?

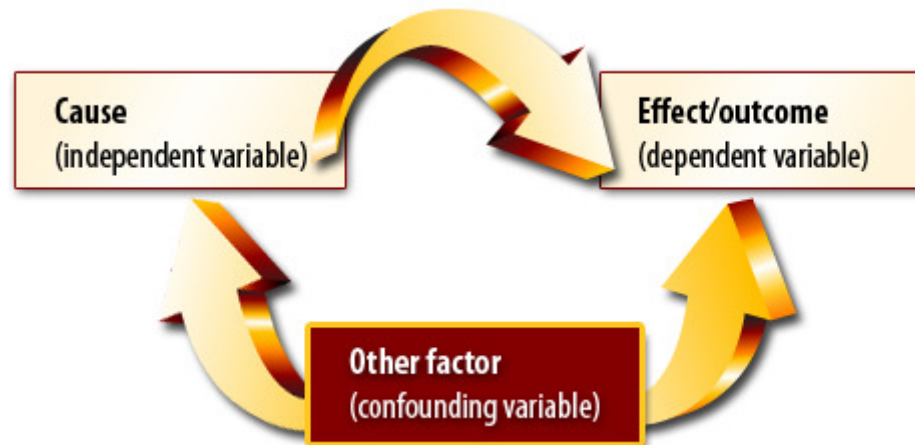
- Limited consensus between studies.
- **Individual/Personal Characteristics**
  - CCN age, years of experience & resilience
- **Work Environment**
  - Macro/Meso/Micro Level
- **Job Characteristics**
  - Lack of Decision Authority, Autonomy & Lack of Structural Empowerment & Shift Work

(van Dam et al 2013; Mrayyan 2009; Tummers et al 2006; Tigert & Laschinger 2004)

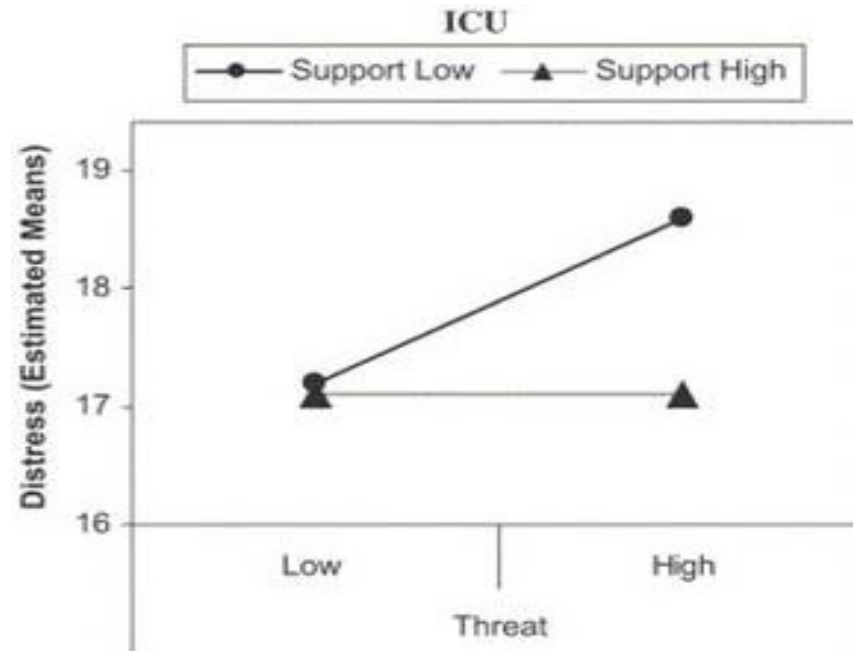
# 3. What are the Consequences of Work-Related Stress in CCNs?

| Individual Consequences   | Team Consequences        | Organisation Consequences   | Patients Consequences  |
|---|--------------------------|---|--|
| <p><b><u>Psychological</u></b><br/> <b>Affect/Mood</b> - Job Satisfaction; Anxiety/Depression, Burnout, PTSD, Work Pressure, Moral Distress<br/> <b>Cognitive</b> - Intention to Leave/Quit</p> | <p>Burnout Contagion</p> | <p>Mortality Rate<br/>                     Length of Patient Stay</p> | <p>Patient Safety<br/>                     Quality of Care</p> |
| <p><b><u>Physical</u></b><br/>                     Musculoskeletal Symptoms</p>   |                          |   |  |
| <p><b><u>Behaviour</u></b><br/>                     Turnover, Absenteeism</p>   |                          |   |  |

# What are Third Variables?



## 4. What Factors Moderate &/or Mediate the Effects of Work-Related Stressors?



Moderating effect of 'supervisory support' on the relationship between CCNs perceptions of 'threat' and 'psychological distress' among CCNs (P=0.023)

(Verhaeghe et al 2008)

## 5. Is there a Relationship Between Patient Safety & CCN Work-Related Stress & Well-being?

- Cannot be answered conclusively.
- Only 3 studies measured the relationship between CCN work-related stress & patient safety.
- Patient safety operationalised from perception of CCNs & includes:
  - Medication Errors
  - Patient Handling Behaviour
  - Adverse Events & Quality of Care

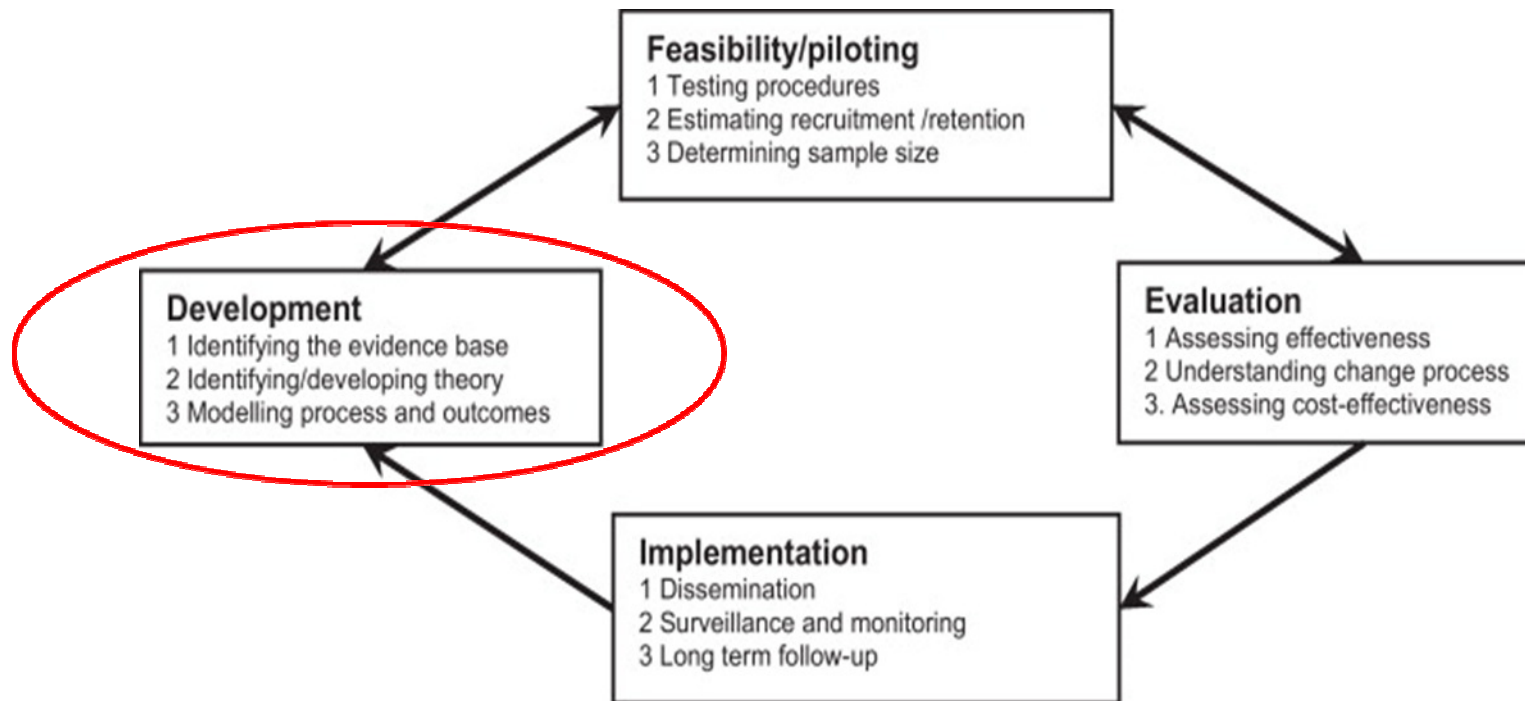
(Lee et al 2011; Maiden et al 2011; Mallidou et al 2011)

# Conclusion

- Antecedent factors .
- Prevalence of work-related stress in CCNs in UK is unclear.
- Motivation & Work Engagement not captured.
- Literature is 'Atheoretical'.
- Methodological limitations
- Findings are heterogenic.
- Few intervention studies.

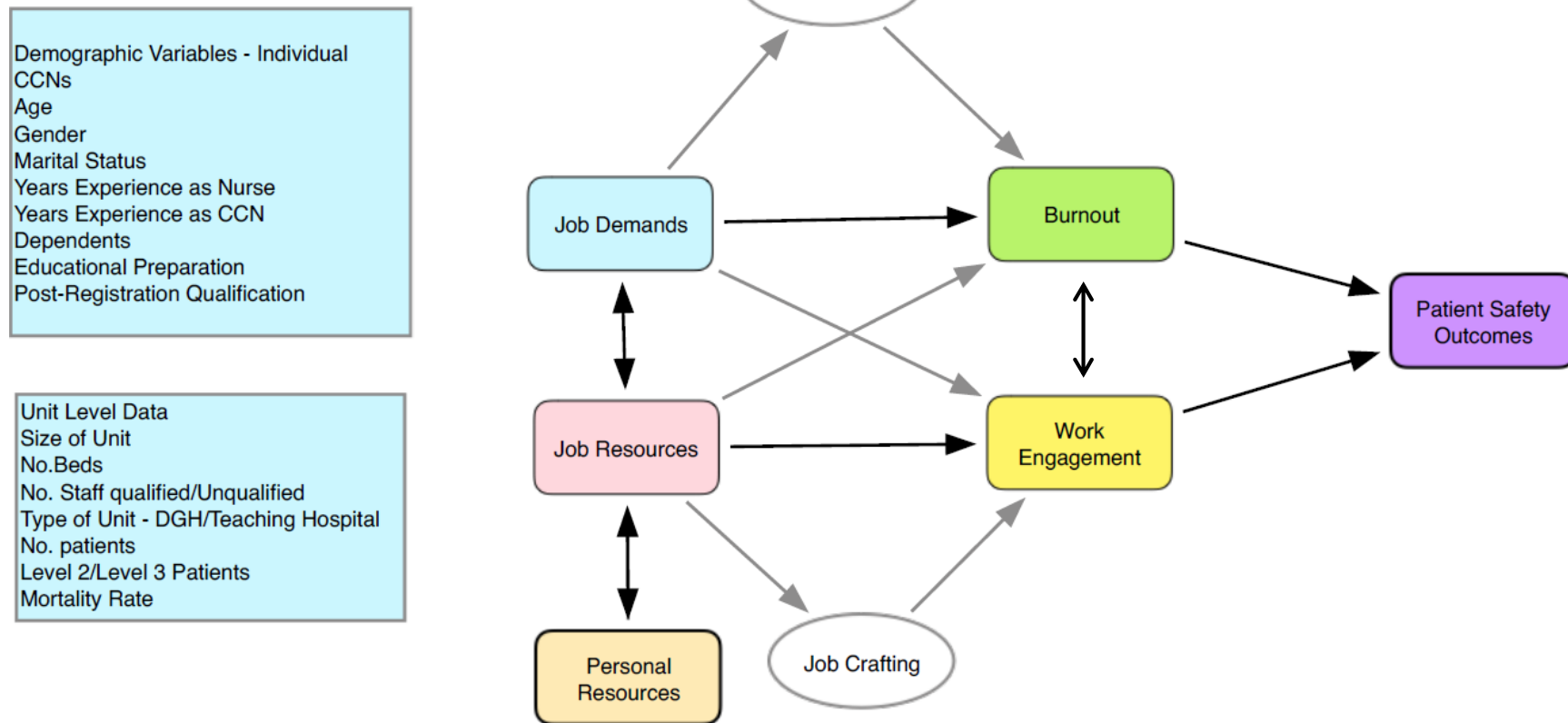


# Developing & Evaluating Complex Interventions (MRC 2008)



(Source: Craig et al 2013)

# Theoretical Underpinning of Proposed Study



(Based on Bakker & Demerouti 2014)

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