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To what extent does the type of ethical climate may predict missed nursing care in hospitals

**1st RANCARE CONFERENCE - COST Action
THE CHALLENGES OF NURSING CARE RATIONING**

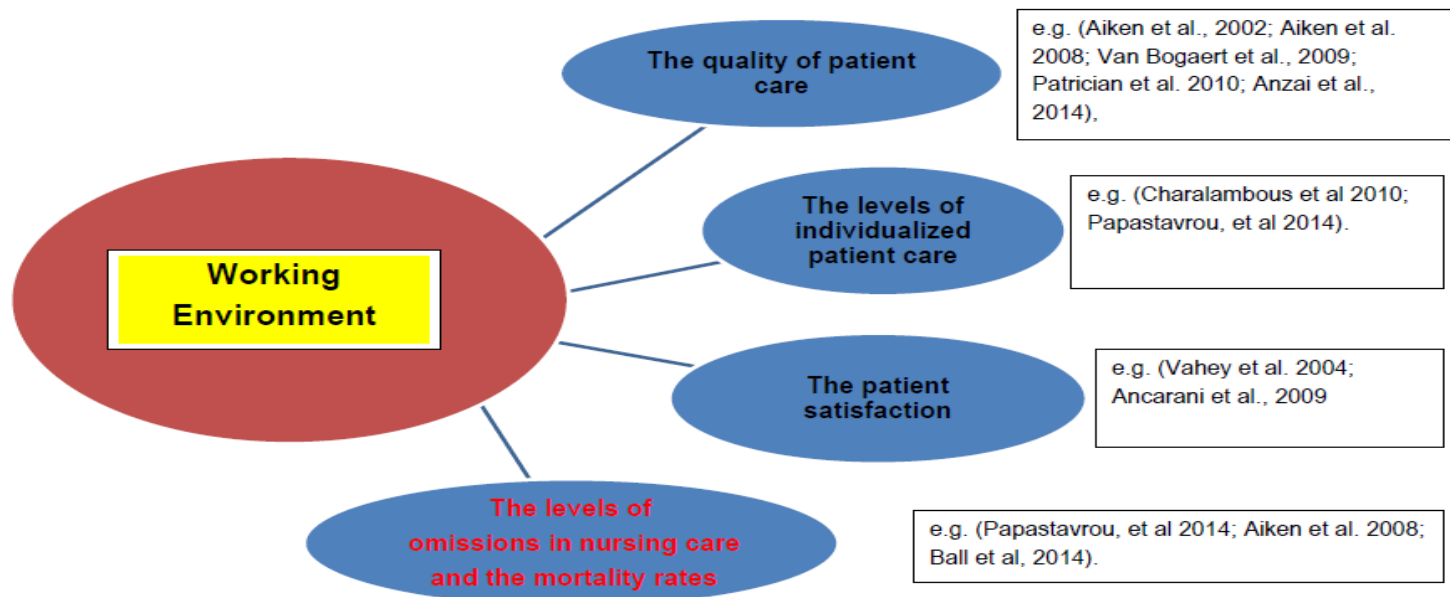
Thursday 23rd February 2017, Limassol, Cyprus

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Background of the study

- The achievement of the **objectives of hospitals** and the provision of **quality care**, often **require improvements in the working environment**.
- Employees' **perceptions of their working environment** in health care has been **associated with**





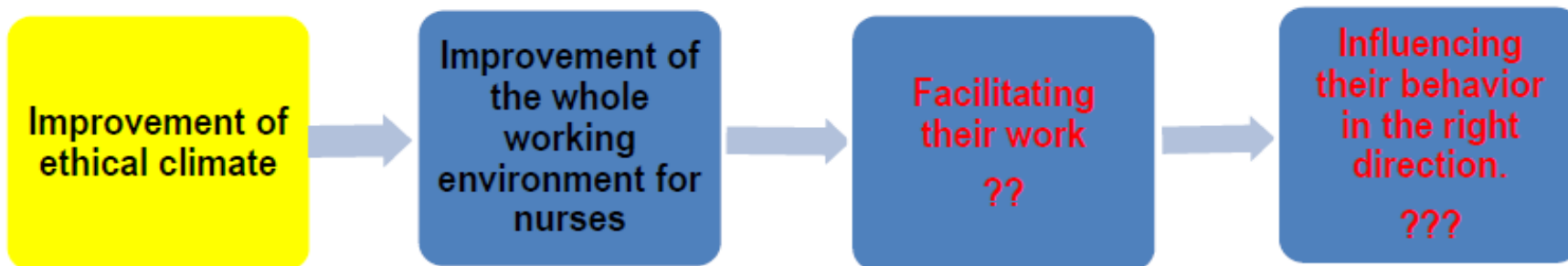
Background of the study

- **Ethical Climate** = A dimension of the whole working environment.
- **The theory suggests** that the types of Ethical Climate that exist in an organization **reflects the collective behavior** of the employees in this organization (Victor & Cullen, 1987).
- However **nursing research** that focused, **on the types** of ethical climate **is limited** and much **fewer** in relation to **missed nursing care**
- There is some evidence that the types of ethical climate are associated to the frequency of omissions of nursing care. (Only one study to the best of our knowledge - specifically in cancer care units)
- **However** if the types of ethical climate can predict the occurrence of missed nursing care in hospitals is unknown.



Background of the study

- It was further suggested **that the improvement of ethical climate in health care facilities, could improve the practice environment of nurses** and this in turn could possibly facilitate their work and influence their working **behavior** towards an ethical direction.
- **Thus, we decided to explore the relationship (if any) of the types of ethical climate, which exist in hospitals, with missed nursing care.**



Olson, 1998; Schluter et al 2008; Hart, 2005; Filipova 2009)



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Purpose of the study

- **To investigate and describe** the types of ethical climate that may exist in the Public Hospitals of the republic of Cyprus, as they are perceived by Cypriot Nurses **and the possible relationship** that these types **may have, with missed nursing care in these hospitals.**

Research objectives:

- To find out **the types of ethical climate** that exist in public hospitals of Cyprus Republic
- To describe **the dimensions and elements of care** that are **missed most often** in the public hospitals of Cyprus Republic
- To examine **if the types of ethical climate which exist in hospitals can predict the score of missed nursing care** (the overall score of missed nursing care)



Defining Concepts

- **Missed Nursing Care** is defined as *“any aspect of required patient care that is omitted (either in part or in whole) or delayed.”* (Kalisch, et al 2009 p. 1509)
 - *and is measured in this study by the Missed Nursing Care Survey tool - MISSCARE Survey, of Kalisch and Williams (2009).*
- **As Required patient care** for the purpose of this study is *considered as any element of care that is offered to patients at any stage of the nursing process, on the basis of the established professional nursing standards and without any delay in order to satisfy the needs of patients.*



Defining Concepts

- **The ethical climate** has been defined as: “*The shared perceptions of what is ethically correct behavior and how ethical issues should be handled in organizations*”. (Victor & Cullen 1987 pp. 51–52)
- **Ethical climate types** are considered, for this study, **the types suggested by the typology of ethical climates of Victor & Cullen (1987; 1988),**
 - and they reflected by **Ethical Climate Questionnaire (ECQ).**



Theoretical Framework

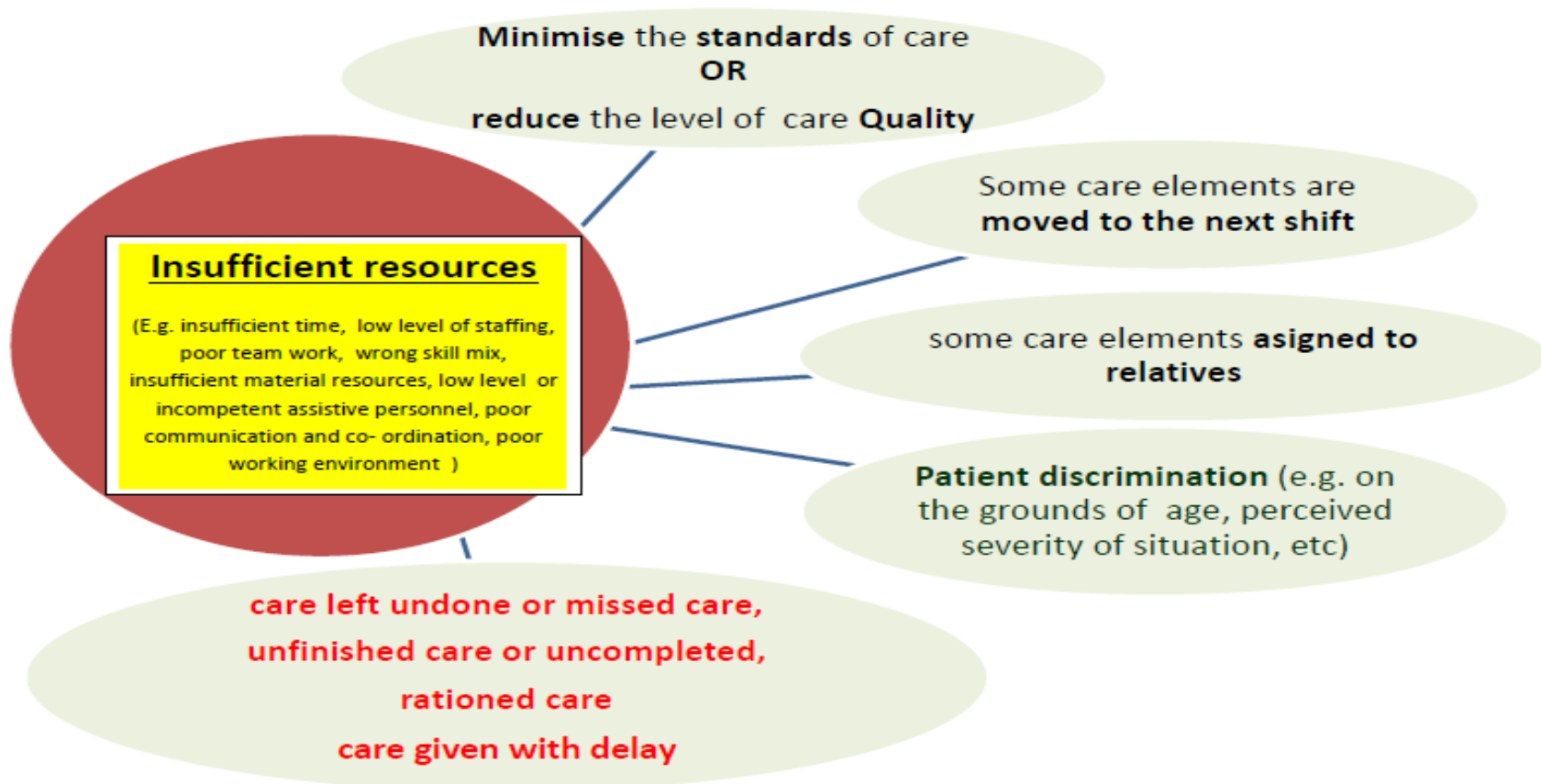
Missed nursing Care- Rationing of nursing Care

- The phenomenon had been **mainly investigated within** the framework of scarcity of resources, cost reductions and economic constraints.
- **The dominating view** is that **when resources are not sufficient**, as for nurses to be able provide all the necessary care to all patients (E.g. In cases of insufficient time, low level of staffing, poor working environment etc) **nurses are forced to ration their attention across patients or across care activities by using their clinical judgment** to prioritise assessments and interventions – **increasing** as such the **risk of negative patient outcomes** (Schubert et al., 2008).



Theoretical Framework

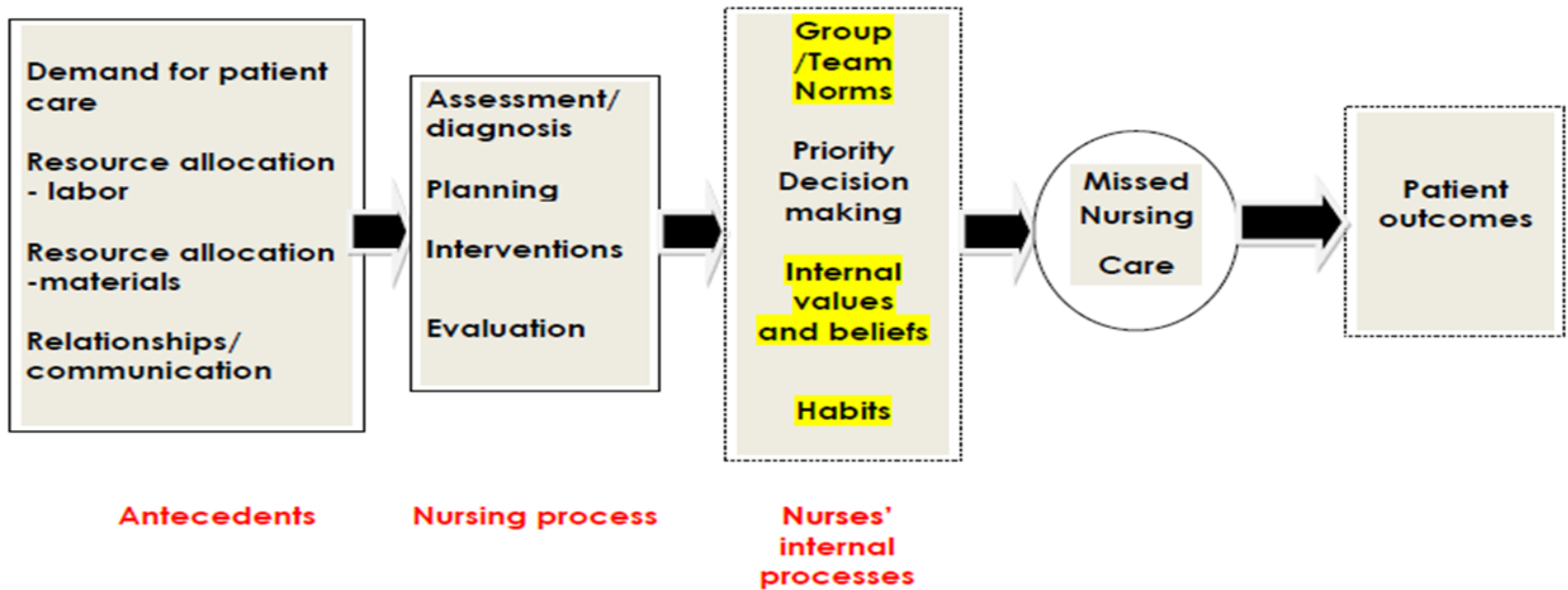
Missed nursing Care- Rationing of nursing Care





Theoretical Framework

Missed nursing Care Model (Kalisch et al., 2009)



Source: Kalisch, B.J., Landstrom, G.L., Hinshaw, A.S., 2009. Missed nursing care: a concept analysis. *J. Adv. Nurs.* 65, 1509–17. doi:10.1111/j.1365-2648.2009.05027.x



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Theoretical Framework - The ethical climate

- Ethical climate: A **dimension of the whole working environment** that **reflects the behavior** of employees in the organization (Victor & Cullen, 1987)
- The **implicit and explicit values** that **drive the delivery of health care** and **shape the workplaces** in which care is delivered (Rodney et al., 2006)
- **Implications for nursing practice**
 - It has a great **impact on the decision-making** process
 - On the **quality of care**
 - It **acts as a reference of behavior** when nurses face ethical issues



Theoretical Framework

The typology of ethical climate (Victor and Cullen 1987;1988)

| | | <i>Locus of Analysis</i> | | |
|-----------------------|--------------------|--------------------------|--------------|---------------------|
| | | Individual | Local | Cosmopolitan |
| <i>Ethical Theory</i> | Egoism | Instrumental | | |
| | Benevolence | Caring | | |
| | Principle | Independence | Rules | Law and Code |

Figure 2. Five common empirical derivatives of ethical climate (Victor and Cullen, 1987, 1988; Neubaum et al., 2004).



The types of ethical climate

Caring ethical climates

- are based on a common **concern for the welfare for others**, (Simha & Cullen 2012; Atabay et al. 2015; Borhani et al. 2014) and
- **encourage behaviors that yield** the most positive result for the greatest number of people (Simha & Cullen 2012; Filipova 2009)

Instrumental ethical climates

- encourage **decision making from a selfish standpoint** (Simha & Cullen 2012) and of **behaviors promoting self-interest or organizational interest**. (Filipova 2009; Borhani et al. 2014; Simha & Cullen 2012)



The types of ethical climate

Rules ethical climates

- are guided by an **intense acceptance of local standards**, rules, regulations, procedures and policies such as codes of good practice and behavior (Martin & Cullen 2006; Simha & Cullen 2012) and a clear expectation to follow them strictly. (Borhani et al. 2014)

In a laws and codes ethical climates

- the **compliance to external influences** such as laws, external rules, professional standards and codes of conduct is **essential** (Borhani et al. 2014; Simha & Cullen 2012) and is **required from everyone**, over and above other factors. (Goldman & Tabak 2010; Tsai & Huang 2008)



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The types of ethical climate

In independence ethical climates,

- employees are **expected to follow their own deeply held personal and moral beliefs** (Borhani et al. 2014; Tsai & Huang 2008) to make ethical decisions with minimal impact from external influences (Simha and Cullen 2012).
- Each **person in these climates decides for himself what is morally right or morally wrong** (Borhani et al, 2014 ; Tsai and Huang 2008).



METHODOLOGY

Descriptive, correlational design

Participants

All nurses working in adult in-patients in medical and surgical units in public hospitals of the republic of Cyprus

Research instruments

Translated, back translated, adjusted to the Greek language, validity and reliability tested.

Ethical issues

- The research protocol was approved by the National Bioethics Committee , the Research Committee of the Ministry of Health, and the Data Protection Commissioner according to national legislation
- Permission to translate and use the instruments was granted by their respective authors
- Informed consent given by the participants and all Measures in order to maintain their anonymity and confidentiality have been taken.



Research Instruments – Ethical climate Questionnaire ECQ18

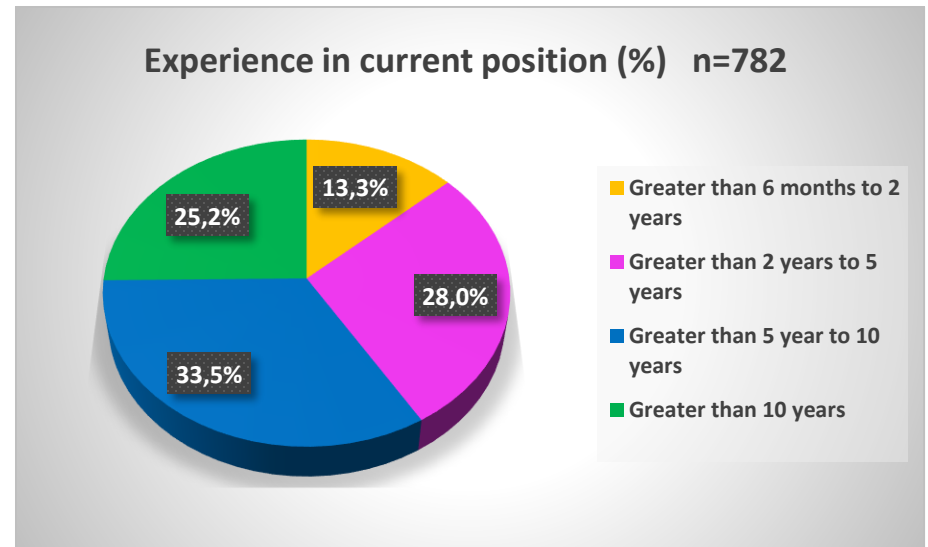
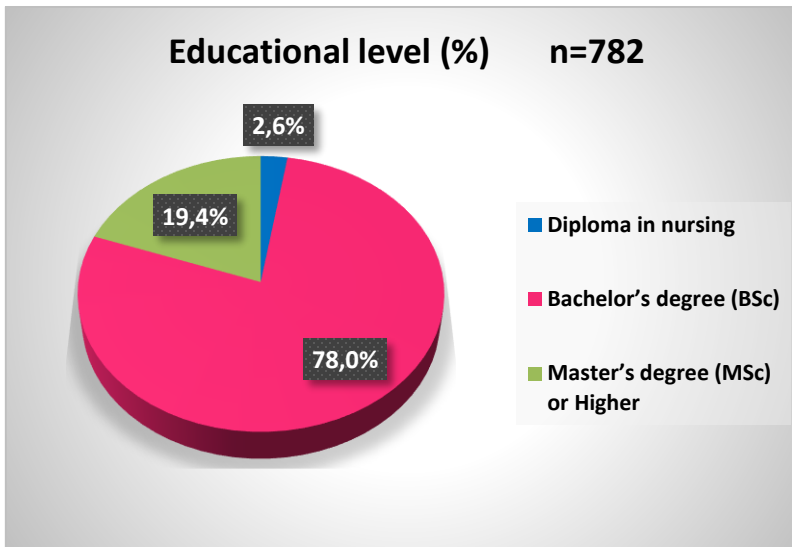
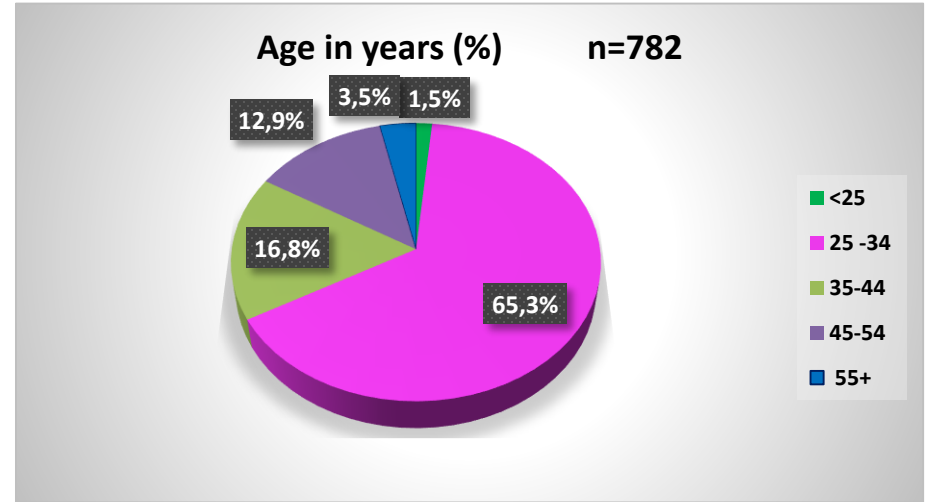
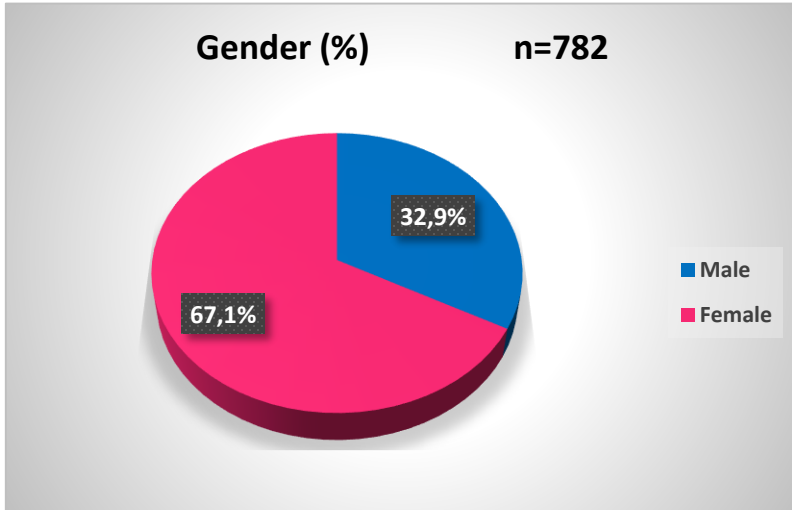
- The **confirmatory factor analysis** using AMOS showed that the **original model** of the ECQ26 (Victor & Cullen 1988) **did not fit the Cyprus data well**.
- The “modification indices” showed that a **5-type structure is satisfied** after **removing eight** items - all five factors **in general remained unchanged**.
- The **internal consistency reliability** for the different types of ethical climate proved to be very satisfactory (**Cronbach’s Alpha** were Instrumental=**0.955**, Caring=**0.969**, Independence=**0.905**, Rules=**0.953**, and Laws and Codes=**0.960**).
- All 18 items are positively phrased. Responses are rated on a 6-point Likert scale ranging from **0 (completely false)** to **5 (completely true)** A higher mean level of an ethical climate type reflects a higher level of respondents’ perception of it.
- Respondents answer **what they consider it exists** in their organizations and not on the basis of their preferred ethical climate type.(Simha & Cullen 2012)



Research Instruments – Missed care Survey tool (Nurses Version)

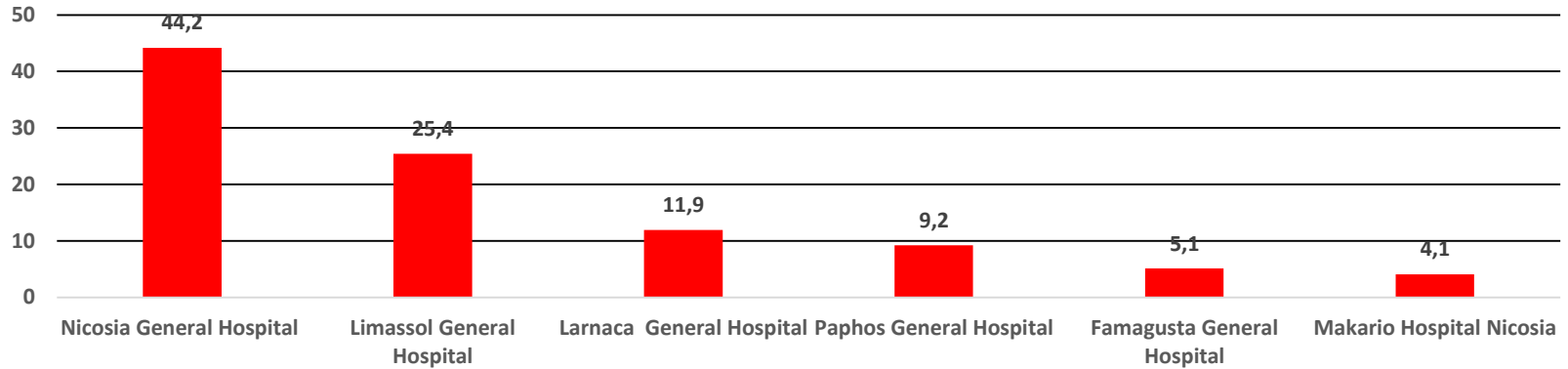
- From the Missed care Survey (Kalisch & Williams , 2009) we used **the Demographics** part and **the Part A** of the survey
- The **construct validity** were examined using **exploratory factor analysis** - **Two factors were extracted** with eigenvalues 8.278 and 6.649 respectively
 - **1st Factor** - Labeled as Activities of Daily Living (**ADL Missed**) (includes **12** items).
 - **2nd Factor** - Labeled as “**Acute Care Missed** ”(includes **12** items)
- The **internal consistency reliability** proved to be very satisfactory. For the **total MISSCARE (Part A) scale Cronbach’s Alpha =0.957**), “Activities of Daily Living (**ADL Missed**” Cronbach’s Alpha = **0.914** , “**Acute Care Missed**” Cronbach’s Alpha = **0.877**).
- All items are **rated on a 5-point Likert scale** starting from **1 (never missed)** to **5 (always missed)**. Higher scores represent higher levels of missed care.

Results – The participants profile (n= 782) (Response rate= 81.5%).

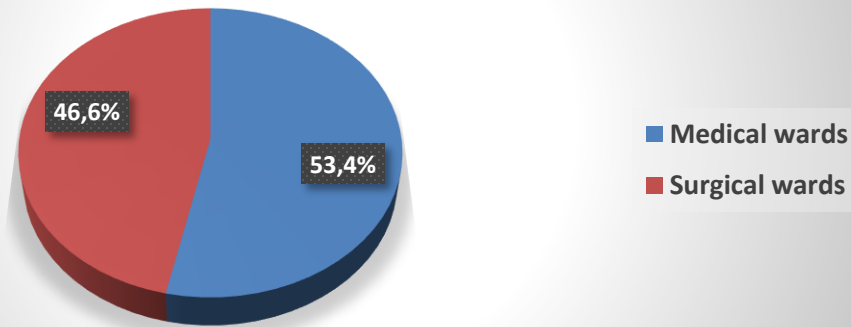


Results – The participants profile (n= 782)

Participants Hospital (%) n= 782



Participants working unit (%) n=782





Results – Missed Care

Table: Descriptive Statistics of Missed Care Survey Scale and subscales

| Scale | Items | Mean | SD | Min | Max | Cronbach's alpha |
|-------------------|-------|------|------|------|------|------------------|
| Total Missed Care | 24 | 2.51 | 0.47 | 1.25 | 3.67 | 0.936 |
| ADL-Missed Care | 12 | 3.04 | 0.58 | 1.33 | 4.42 | 0.925 |
| Acute Care Missed | 12 | 1.98 | 0.45 | 1.00 | 3.25 | 0.877 |

Range:1–5, where 1 = never missed And 5 = always missed

Overall percentage of missed care: 49.8%

Results – Missed Care

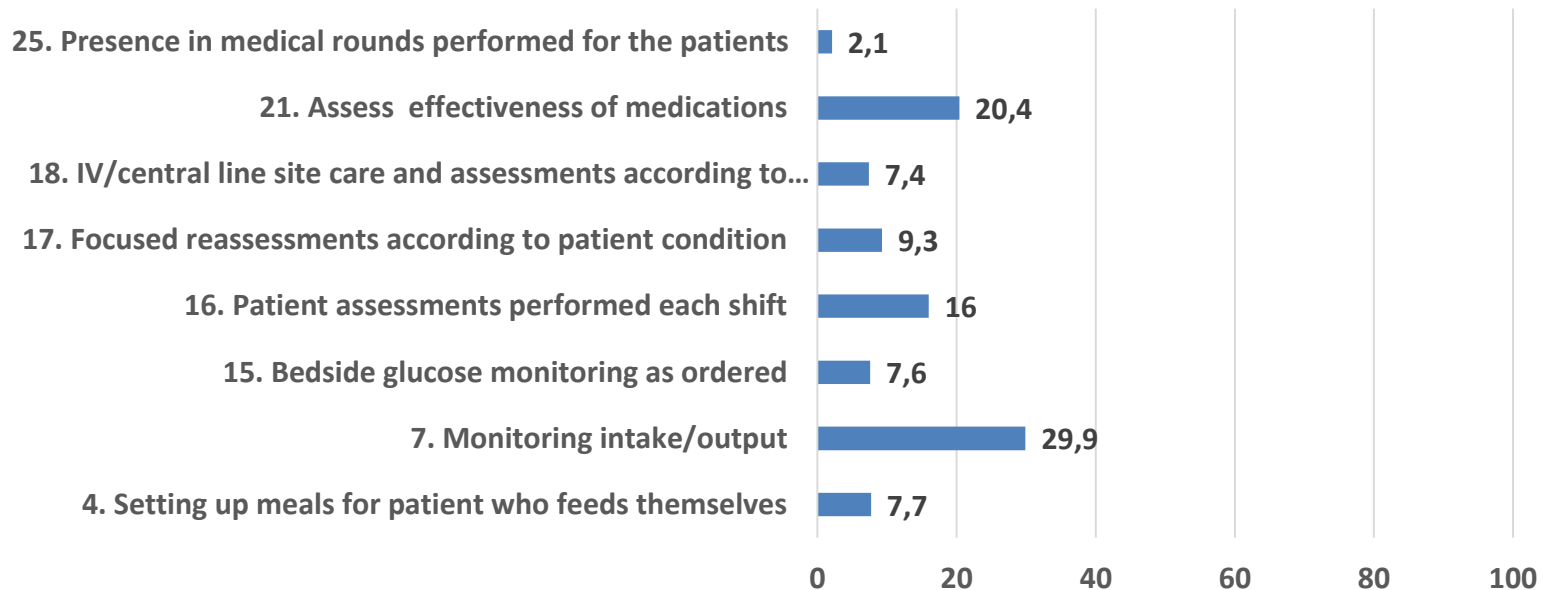
Care elements that are more frequently missed



- **3, 4, 5**= “occasionally”, “frequently” and “always” Missed = missing ratings
- **1 and 2**= “rarely” and “never” Missed = no missing ratings
- **All elements that are more frequently missed belong to ADL-Missed care subscale** (one of the dimensions revealed from EFA) **except** number 8 (full documentation...)
- Results are **consistent with other studies** internationally

Results – Missed Care

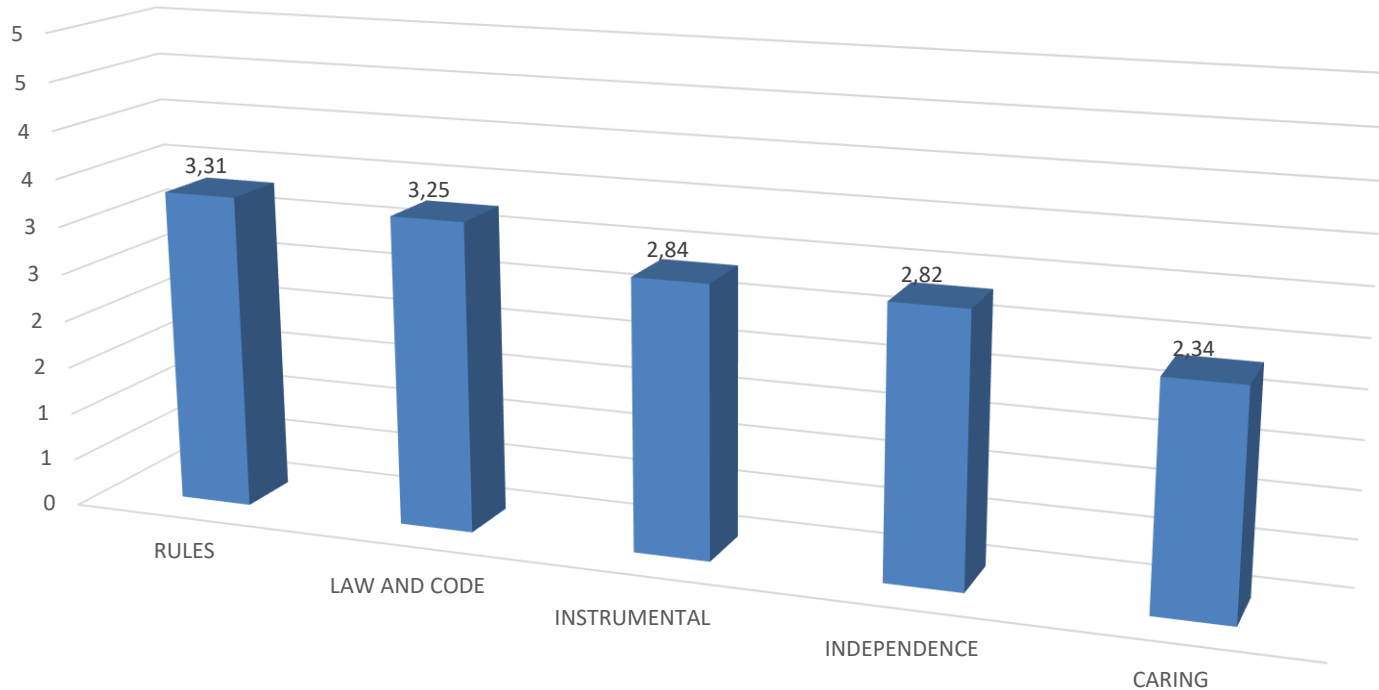
Care elements that are rarely or never missed



- **3, 4, 5**= “occasionally”, frequently” and “always” Missed = **missing** ratings
- **1 and 2**= “rarely” and “never” Missed = **no missing** ratings
- **All elements rarely or never missed belong to acute care -Missed subscale** (dimension revealed) – Mostly related to patients current health condition and TM
- Results are **consistent with other studies** internationally

Results

The prevailing types of ethical climate



- **In Cypriot public hospitals (medical and surgical units)**
- **Range 0 -5** (a 6-point Likert scale) Where 0 = completely false to 5 = completely true
- A higher mean level of an ethical climate type reflects a higher level of respondents' perception of it



Results

Table: Pearson correlation coefficients for the relation between the types of ethical climate and missed nursing care

| TYPES OF ETHICAL CLIMATE | MISSED NURSING CARE | | |
|--------------------------|---------------------|-------------------|-------------------------|
| | ADL-missed | Acute care missed | Total missed care scale |
| Instrumental | .630** | .548** | .642** |
| Independence | .585** | .539** | .610** |
| Rules | -.581** | -.427** | -.548** |
| Caring | -.561** | -.537** | -.596** |
| Law and Code | -.643** | -.424** | -.589** |

** Correlation is significant at $p < 0.001$

Higher level of Instrumental and Independence types of ethical climate are significantly ($p < 0.001$) associated with higher levels of missed care (all dimensions). (positive correlations). On the other hand higher level of caring, rules and law and code type are significantly ($p < 0.001$) associated with lower levels of missed care (all dimensions) (negative correlations)



Results

Does the type of ethical climate predict the score of total missed nursing care after controlling for certain variables?

- The preliminary regression results showed that of all the variables that were included in the model (**nurses' demographic characteristics, job title/role, working hospital, working unit, rates of absenteeism**, Number of patients care for, Number of admissions they had, Number of discharges they had), **only the variables age, hospital, absenteeism, ward and number of admissions were significant.**
- Therefore, In a hierarchical regression approach the variables than were found to be significant were included in the first step.



Results: Hierarchical regression for effect of ECQ factors on MSA total score, after controlling for other variables

| Variables | B | p-value | Rsquare | |
|-----------------------------|--------|------------------|---------|--|
| Gender | 0.012 | 0.708 | 0.328 | |
| Age | -0.065 | 0.011 | | |
| education | -0.015 | 0.655 | | |
| experience in role | 0.015 | 0.428 | | |
| experience in Ward | 0.000 | 0.995 | | |
| job title/ role | 0.078 | 0.219 | | |
| Hospital | 0.045 | <0.001 | | |
| Absenteeism | 0.188 | <0.001 | | |
| Ward | -0.190 | <0.001 | | |
| Number of patients | 0.012 | 0.275 | | |
| Number of admissions | -0.047 | 0.017 | | |
| Number of discharges | 0.011 | 0.539 | | |
| ECQ Instrumental | 0.060 | 0.040 | | |
| ECQ caring | -0.056 | 0.016 | | |
| ECQ Independence | 0.041 | 0.074 | | |
| ECQ rules | 0.118 | <0.001 | | |
| ECQ law and code | -0.170 | <0.001 | | |



Results: Hierarchical regression for effect of ECQ factors on MSA total score, after controlling for other variables

- In a second step the types of ethical climate (ECQ factors) were also included and the results showed that all the ECQ factors had an effect on the total score of missed nursing care (p-values<5%) even after controlling for the variables (found to be significant) with the only exception the variable independence, which had an effect, but at the 10% level (marginal effect).
- Instrumental, independence and rules have a positive effect on total score of missed care scale (higher values of these types are associated with higher levels of Missed care),
- On the other hand caring and law and code have a negative effect (higher values of these types are associated with lower levels of Missed care).



DISCUSSION

- **To the best of our knowledge, this is the first study exploring missed care in relation to the types of ethical climate that exist in the hospital setting.**
- **Reported levels of missed nursing care was moderate- in consistency to other studies internationally – and perhaps showing again a tradition of hiding nursing care omissions**
- **However, the results are raising concerns as to the patient safety since basic elements of care are not done, postponed or performed at a less optimum level (e.g. mouth care, mobilization, education, emotional support, etc)**



DISCUSSION

- **In our study the caring ethical climate, which is desirable to exist in the hospital setting ranked last in the list. This is consistent to Tsai & Huang (2008) but in contrast to most other nursing studies (e.g. Joseph & Deshpande 1997; Borhani et al. 2014; Deshpande & Joseph 2009; Filipova 2009; Abou Hashish 2015) where it ranked much higher in the list of the types exist in hospitals. Thus, there seems to be room for improvement in the ethical climate of our clinical settings.**



DISCUSSION

- **When Nurses perceive the ethical climate in their working place as one that focus in egoistic tendencies, they also perceive that more nursing care activities are missed.**
- **Care activities are also missed in ethical climates guided by personal believes, Personal morality and individual sense of what action is right and what is wrong.**



DISCUSSION

- **When nurses perceived that the ethical climate in their working organization is guided by benevolent and utilitarian ideals utilitarianism (focus on maximization of good for maximum number of people), then they report less care omissions.**
- **The same exist when the ethical is perceived as one that has a strong focus in the compliance and respect of ethical principles, laws and codes of ethical conduct.**



DISCUSSION

Having in mind the results of this study one can assume that by reducing the influence of Instrumental and Independence types of ethical climate and by fostering Caring, and Law and code types, one can assist in the efforts to decrease missed nursing.

However, further research is needed in order to have an increased understanding of the relationship between the types of ethical climate and the levels of missed nursing care .



CONCLUSION

Our study contributes to the better understanding of the phenomenon of missed care by revealing a relationship between ethical climates and missed nursing care in a single country in Europe.

Similar studies from other countries (at European and at international level) may create a more robust evidence regarding this relationship. Additionally, other studies are needed, in order to establish if causal relationships between ethical climates and missed nursing care exist



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