ΟΚΤΩΒΡΙΟΣ - ΔΕΚΕΜΒΡΙΟΣ 2006 ΤΟΜΟΣ 5 ΤΕΥΧΟΣ 4

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# VEMA OF ASKLIPIOS

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- Πολιτική Ανάπτυξης Προγραμμάτων Αγωγής Υγείας στη Σχολική Κοινότητα
- Γεφυρώνοντας το Χάσμα μεταξύ Νοσηλευτικής Θεωρίας και Πράξης
- Εισάγοντας Νοσηλευτικές θεωρίες στην Κλινική Άσκηση
- Προσέγγιση του Προβλήματος των Μυοσκελετικών Κακώσεων της Οσφυϊκής Μοίρας
- Μη Στεροειδή, Αντιφλεγμονώδη Φάρμακα
- Πεθαίνοντας από Ντόπινγκ για τη Νίκη
- Εγκυμοσύνη σε Μικρές και Μεγάλες Ηλικίες Επιπτώσεις στη Μητέρα, στο Έμβρυο και στο Νεογνό
- Συμπεριφορές Υγείας Νοσηλευτών

- Policy for the Development of Health Education
   Programs in the School Environment
- Bridging the Gap between Nursing Theory and Practice
  - Introduction Nursing Theories in Clinical Practice
    - Dealing with the Problem of Musculoskeletal Lumpar Damage
      - Non Steroidal Antinflammatory Drugs
        - Dying from Doping to Win
- Pregnancy in Young and Advanced Ages Consequences in Mother, Fetus and Newborn
- Health Attitudes and Professionals of Health Services

## ΤΟ ΒΗΜΑ ΤΟΥ ΑΣΚΛΗΠΙΟΥ

## VENIA OF ASKLIPIOS

ΟΚΤΩΒΡΙΟΣ-ΔΕΚΕΜΒΡΙΟΣ 2006 ΤΟΜΟΣ 5 ΤΕΥΧΟΣ 4

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## ΕΙΣΑΓΟΝΤΑΣ ΝΟΣΗΛΕΥΤΙΚΈΣ ΘΕΩΡΙΈΣ ΣΤΗΝ ΚΛΙΝΙΚΉ ΑΣΚΗΣΗ: ΑΝΑΛΎΣΗ ΜΙΑΣ ΚΑΙΝΟΤΟΜΙΑΣ

Αικατερίνη Ε. Χάλαρη

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Περίληψη Οι θεωρίες και τα μοντέλα στη νοσηλευτική αποτελούν νέα πηγή γνώσης εδώ και λίγες μόλις δεκαετίες. Δεν έχουν τύχει όμως ευρείας αποδοχής απ' όλους τους κλινικούς χώρους ανά τον κόσμο. Ορισμένοι συγγραφείς υποστηρίζουν ότι είναι αδύνατον για τους επαγγελματίες υγείας να εργάζονται χωρίς τη χρήση κάποιας θεωρίας ή νοσηλευτικού μοντέλου, καθώς αυτά συμβάλλουν στην υποθέτηση μιας κριτικής στάσης απέναντι σε καταστάσεις του νοσηλευτικού γίγνεσθαι και παράλληλα στην παροχή υψηλών επιπέδων φροντίδας. Το παρόν άρθρο με βάση τις θεωρίες αλλαγών αναλύει τη διαδικασία για την εφαρμογή δύο θεωριών στην κλινική άσκηση, τη θεωρία του ελλείμματος της αυτό - φροντίδας της Οτεm και το μοντέλο των δραστηριοτήτων των Roper, Logan και Tierney.

Η διαδικασία εισαγωγής αλλαγών – καινοτομιών χαρακτηρίζεται άκρως σημαντική για την ανάπτυξη της νοσηλευτικής καθώς η επιτυχής διαχείριση της αλλαγής θα συμβάλλει στη βελτίωση αλλά και τη μεταστοιχείωση του γενικότερου συστήματος υγείας. Η ενεργή συμμετοχή των νοσηλευτών και η εξοικείωση τους με τα χαρακτηριστικά ενός συγκεκριμένου πλάνου θα συμβάλει στη υιοθέτηση της αλλαγής στο συγκεκριμένο εργασιακό περιβάλλον και θα βελτιώσει την προσφερόμενη φροντίδα με την επιτυχή εκτίμηση, ιεράρχηση και κάλυψη των αναγκών των αρρώστων.

**Λέξεις κλειδιά:** Διαχείριση Αλλαγών, Θεωρίες Αλλαγών, Διάχυση Καινοτομιών, Νοσηλευτικές Θεωρίες, Κλινική Άσκηση

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INTRODUCING NURSING THEORIES IN CLINICAL PRACTICE: ANALYSIS OF AN INNOVATION

Abstract Nursing theories and models although have emerged a few decades in nursing developed countries, they have not attain extensive usage in all clinical settings worldwide. Some authors have strongly argued that it is impractical for practitioners to practice without a model, as models encourage a questioning approach and enable the delivery of high standard nursing care. The article utilising theories of change analyses a proposed model for the application of Orem's self - care deficit theory and Roper, Logan and Tierney model into clinical practice. The process of change has been considered crucial for the development of the profession and its successful management with the introduction of innovations into clinical practice is expected to contribute to the advancement and transformation of the health - care system. It is anticipated that the active involvement of nurses within a changing process will facilitate their familiarisation to the special features of a planned change project in their own working environment as well as improving the total care provided by meeting patient's needs.

**Key words:** Change Management, Change Theory, Clinical Practice, Diffusion of Innovations, Nursing Models

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#### Introduction

Managing innovation and change in nursing has been regarded as one of the most crucial approaches to the transformation of the health – care system<sup>1</sup> as a unchanging status does not appear an alternative and change has been considered fundamental for the

survival and development of the nursing profession<sup>2,3</sup>. It is recommended that by the holistic way nurses approach their patient, nurses and their managers have to approach change, as knowledge of change as a phenomenon with its unique characteristics, will prepare nurses to actively participate in health care challenges<sup>4</sup>. For more than a century nursing has been

searching for what Nightingale described as the 'existing' yet 'unknown elements' of its essence and for professional identity<sup>5</sup>. This lengthy endeavour has been quite prolific, as it has fostered the development of a unique knowledge base for nursing and challenged nurses to confront and deal with a variety of professional issues<sup>6</sup>. The development of theories and models in nursing are some evidence of this process. Since their evolution more than four decades there has been a lot of debate about their usefulness and the role they serve in everyday clinical practice. It is suggested that nursing models have contribute in formulating a body of knowledge for the profession which may support a more autonomous practice for professionals and facilitate nursing to escape from the wings of the traditional biomedical model<sup>1</sup>.

Some authors have strongly argued that it is impossible for practitioners to practice without a model, as models encourage a questioning approach to care, enable well - coordinated care to take place and that they play a critical role in influencing the wider context of health care<sup>8</sup>. The use of models provides direction to nursing practice, supports meaningful communication between practitioners and enables evaluation of care standards<sup>7</sup>. Others are arguing that nursing development might have been diverted by the models and have missed other useful avenues of improvement<sup>9</sup>, while models focus on how nursing ought to be and not how it is practised in reality<sup>6</sup>. While models make the elements of nursing explicit, there is the possibility of over - simplifying complex phenomena and providing a false sense of security assuming that care planning and documentation are indicative of good nursing practice when this might not be the case<sup>10</sup>.

## The Proposed Nursing Theories. Usage and Critique

Responding to the need of identifying and understanding the elements of nursing, the Roper, Logan and Tierney model<sup>11</sup> was developed in the early '80's and has been widely used in a variety of clinical areas. The reality that the model is a product of a collaborative effort of three British well - experienced nurses and educationalists as well its simplistic language, facilitated the development of a common understanding and communication between nurses<sup>12</sup>. It provides a systematic approach for assessment and encourages individual care to take place, as the nurse can decide priorities among the activities of living for each patient<sup>13,14</sup>. Roper et al define health as 'the optimum level of independence which enables the individual to function at his maximum potential'<sup>11</sup>(p.7). From this definition nursing is seen as a profession which focus is, to help individuals to alleviate problems associated with the twelve activities of living.

On the other side of the Atlantic, Dorothea Orem developed her self - care deficit theory 15. Orem states that nursing is a service of deliberately selected actions to assist individuals to maintain their self - care 15. She describes three different types of nursing systems according to the extent of contribution of nursing; the wholly compensatory, the partly compensatory and the supportive - educative nursing system. Although she perceives the individual as an integrated whole, she makes the assumption that each person is continuously engaged in activities in order to maintain self - care and has an inner motivation in achieving this 16. Orem's definition of health supports the World Health Organization definition on health, and views health as a dynamic and ever changing process<sup>15</sup>. Orem's system of nursing, clearly defines when the contribution of nursing is considered essential, taking into thought the self care deficits of each individual patient<sup>17</sup>.

Both models have extensively been used in various areas of practice. Orem's model for Coldwell - Foster and Bennett<sup>18</sup> has the major strength that is applicable for nursing practice by both the beginner as well the advanced practitioner. Additionally for Girot<sup>19</sup>, Roper's et al model has developed a common ground for communication between nurses with its structured format and simplistic language. This later aspect in relation to Orem's model has presented some difficulties as she uses atypical terms throughout her theory analysis. However Roper's et al<sup>11</sup> model although it does not always direct the organization of care, its dynamic nature is illustrated by the ability of setting new goals and allowing nurse to decide unique priorities for each individual patient<sup>14</sup>. In contrast the Roper's et al model<sup>11</sup> appears quite weak in patient education which for Orem's<sup>15</sup> model, patient involvement on decisions concerning care is one of its main underlying assumptions. Research evidence indicate that receiving insufficient or not receiving at all information from nurses on health - care issues. often source became major of patients' dissatisfaction<sup>20</sup>.

#### Change Management

Like the introduction of the nursing process, the Roper, Logan and Tierney model<sup>11</sup> was introduced in clinical practice in a short period of time and mainly by utilising a top – down approach. As nursing strives to become an evidence - based profession in every aspect of its practice, the development of nursing documentation needs to be based on firm ground. Combining elements of different nursing models has been supported by Hardy<sup>21</sup> who stressed the importance of using multiple models as opposed to a single theory, because adopting a single approach seems to be too naive to view holistically patients and their social surroundings.

A new nursing record would aim to enrich the existing with sections on patient education, would aim to make more explicit the nursing care needed and provided, identifying in cooperation with the patient self abilities and self - care deficits. Additionally the record would aim to define the stages of the nursing process, in order to provide a clear picture of each stage and to enable evaluation of care to take place. Each objective of the change is also in guidelines with the ward philosophy, which is based upon a humanistic approach to nursing practice. This approach intents to provide quality care to the patients and aims to preserve and enhance patient independence by encouraging their active involvement in the delivery of care.

The overall framework for the change would be based on Kurt Lewins'22 theory of change. According to the theory, change is viewed in occurring in three stages: unfreezing, changing or moving to a new situation, and re - freezing. Unfreezing refers in creating a sense of discomfort with the existing situation and at the same time stimulating motivation and a need for the proposed change<sup>23</sup>. Moving to the next phase implies the implementation of the change. Finally the re - freezing phase follows, in which the aim is to stabilise and integrate the change within the normal function of the wider health delivery system. Lewin<sup>22</sup> claims that any present state is a dynamic equilibrium of driving and restraining forces, which have to be identified by carrying out a force - field analysis. By recognising the antagonistic forces, then two tactics can be used: to strengthen the driving forces and - or to weaken the resisting forces. For Gillies<sup>24</sup> this intends to make the target system to feel unsatisfied with the status quo so they will accept a proposed altered future status. Driving forces which was identified were the unmet needs of the patients, especially those related to their education, the inclination of the profession towards health promotion, the support of evidence - based practice and the use of the new nursing record as a tool for evaluation of standards of care. The resisting forces presumed to be the degree of unwillingness and commitment for implementing the change and the time and resources needed.

Lewin's<sup>22</sup> approach to change holds the advantages that is applicable to a wide range of situations, that although lengthy the change process will lead to a long-term new reality and that allows participation for those who are willing to participate<sup>23</sup>. The element of participation that this approach allows, has classified it as a 'bottom - up' approach. Although a publication of Tiffany and Johnson<sup>25</sup> presents the approach as a 'top - down' according to the view that the goals are predetermined by someone else rather than the participants, seems to be in contrast with the essence of the theory itself, which encourages active

participation of members and allows a decision to be made, positive or negative towards the proposed change.

Although very few research studies have search the impact of the two approaches, for Morison<sup>26</sup> there seems to be a growing feeling among nurses that the way to improve practice is to create a climate which supports and encourages a questioning approach to practice by those who provide the care, practitioners themselves. Within this type of approach, the person who is going to introduce the proposed change has to act as an 'energiser' 23. This person should operate as a catalyst for the change, in helping to inform others to value themselves the need for change while acting as a resource person throughout the whole project. Having identified the driving and resisting forces by using a force - field analysis, the whole process could lead to the lengthiest part of the unfreezing stage. Reinforcing the need for change as a way of improving practice and simultaneously assessing peoples attitudes and stance towards change, appears to be a very crucial point before their behaviours can be modified<sup>27</sup>. Raising informal discussions in small groups enables the change agent to examine if the previous used force - field analysis was consistent with the reality in practice and additionally this would provide an initial idea of the resistance that is going to be anticapated.

#### Disseminating the Evidence

Once a second more accurate examination of the situation will be completed more specific actions would be planned. Rogers<sup>28</sup> model of diffusion of innovation can be used, with the aim to inform colleagues about evidence which support and informs the proposed change and to remind about the importance of wellknown professional guidelines, protocols and policies which need to be considered for improving future practice. Accordingly a number of meetings could be held with the nursing staff in order to disseminate this evidence and facilitate the need for a change. These meetings could accommodate three different areas. At first a reminder session of the professional code of practice and the aims of the nursing system, which both aim in assisting the nurse to be able to function as an educator for patients. Secondly, teaching sessions on each of the two nursing models that would be used for the development of the new nursing record. The sessions would include analysis of the models' theoretical basis, explanations of their assumptions, descriptions on how they approach the person his environment, health and nursing. In the next sessions published research evidence on the issue would be introduced and critically discussed. Additionally any related attempt in other areas of practice will be presented and criticised.

Except the sessions other more practical tools will be used to facilitate the dissemination of knowledge. Creation of a resource file could summarise all the most important and current publications on the issue. Also a reference list for those who are interested in searching more information to support their decision and finally the notice boards would be used as a mean for communication of all the evidence and also for disseminating key references which support the proposed change. For McKenna<sup>16</sup> unless practitioners have an understanding of the theories and models advantages and limitations they are unable to critically evaluate their usefulness for their patients, other members of the multidisciplinary team and to their students.

At the implementation stage in which the new document is to be used, further support would be offered. This can be implemented throughout written and verbal communication and with additional meetings to address problems or clarify misunderstandings. Furthermore the change agent would delegate responsibilities to other members of staff, such as to act as resource persons, so staff would have access to more than one knowledgeable colleagues. At this stage also and after sufficient period of time so all members of staff can be aware of the evidence, participation can be asked in order to provide the staff the opportunity to shape themselves the new nursing record.

#### Discussion

Rogers<sup>28</sup> strategy is underpinned by the theory that knowledge is the key for change to occur, therefore emphasis is placed on the diffusion of all available information. Although knowledge can be particularly necessary as the target group of the change might have many deficits in their knowledge base, for Sheeham (1990) a rigorously logical argument is not itself a sufficient condition to influence behaviour. This argument might support the choice of Lewins'22 strategy as an overall framework for the change process, as this theory emphasises the importance of empowering the individual by offering knowledge, but also asserts that change will take place when the people involved in it alter their beliefs and attitudes in relation to their everyday practice. Both approaches to change although differ in their assumptions, why and how people change, have a common point: the power of decision is on the people involved in the change process.

For Barone<sup>29</sup> reality resides neither with an objective external world nor with the subjective mind of the knower, but with the dynamic transaction between the two, therefore a combination of quantitative and qualitative evaluation methods can be

used at the assessment phase of the change process. The evaluation can be directed in three areas. Patients' satisfaction about the fulfilment of their educational needs and their views on the care provided within the framework of self - care theory. Staff attitudes and opinions about the new philosophy of care and the actual development of the new nursing record. Patients' views can be collected by utilising a specially designed for the purpose questionnaire This type of evaluation method has the advantage that allows the respondents time to think, it can be anonymous and for the researchers' convenience it can be pre - coded to facilitate the analysis of the data gathered<sup>30</sup>.

Evaluation of the staff attitudes and opinions of the use of the model can take two forms. A questionnaire to assess the application and the validity of the model in practice, in order to identify areas which need further development. Secondly, since the change is a result of collaborative effort of all members of the staff their contribution and at the evaluation phase is considered important. Therefore they will be given the opportunity to express their belief about the new record in a focus group discussion. However, accurate evaluation of any model applied in practice seems to be unattainable, and it is expected that by utilising a variety of assessment methods, we will be able to evaluated the process holistically as much as possible.

#### Conclusion

In conclusion, the two model explored can prove to be particularly useful for practice as for Hardy<sup>21</sup> using a single theory is too naive of viewing holistically the individual and his surroundings. Roper et al (1980) model provides an excellent guide for systematic assessment which also encourages individual care to take place and Orem's 15 self – care deficit model seems to successfully address the deficit in patients' educational needs. But the crucial point seems to be the mutual agreement of professionals to work under the umbrella of a common philosophy and make wise use of elements of different models to improve the quality of care given. This specific effort for improving an aspect of nursing practice, by introducing unused models within nursing ward philosophy and documentation will alter the delivery of care and hopefully will improve the quality of services given by meeting patients needs, and will facilitate the familiarisation of the nursing staff to the unique characteristics of a planned change project in their working environment.

Donalson and Crowley<sup>31</sup> support that if nursing is to continue to evolve as a profession, should respond to changes in the health care needs of the population. Additionally Benner<sup>32</sup> claims that models should not be confused with reality but should used as a tool for

improving practice and not as a mirror. Nevertheless it appears that when we mirror our practice to the models as well as keeping in lines with the characteristics of our working environment, by managing change effectively, we will be able to reach to an improved reality as we are searching for one and our patients deserve it.

#### References

- 1. Manion J. Chaos or transformation. Managing innovation. Journal of Nursing Administration. 1993, 23:41-49.
- 2. Sheeham J. Investigating change in a nursing context. Journal of Advanced Nursing. 1990, 15: 819-824.
- 3. Swan S, McVicar B. The rough guide to change. Nursing Times. 1991, 88: 48-49.
- 4. McPhail G. Management of change: an essential skill for nursing in the 1990s. Journal of Nursing Management. 1997, 5:109-205.
- 5. Nightingale F. Notes on nursing. What it is and what it is not. London, Duckworth, 1979.
- 6. Fraser M. Conceptual nursing practice. 2nd ed. London, Chapman and Hall, 1996.
- 7. Kenny T. Nursing models fail in practice. British Journal of Nursing. 1993,2:133-136.
- 8. Chalmers H. Nursing models: enhancing or inhibiting practice? Nursing Standard. 1990, 11: 34–40.
- 9. Melia K. Learning and working: the occupational socialisation of nurses. London, Tavistock, 1987.
- 10. Pearson A, Vaughan B, and Fitzgerald M. Nursing models in practice. 2nd ed. Oxford, Butterworth Heinemann, 1986.
- 11. Roper N, Logan N, Tierney, A. The elements of nursing. 2nd ed. Edinburgh, Churchill Livingstone, 1980.
- 12. Girot E. Discussing nursing theory. Senior Nurse. 1990, 10:16-19.
- 13. Chavasse J. A comparison of three models of nursing. Nurse Education Today. 1987, 7: 172-186.
- 14. Newton C. The Roper Logan Tierney model in action. London, The Macmillan Press Ltd, 1991.
- 15. Orem D. Nursing: concepts of practice. 4th ed. New York, McGraw Hill, 1985.

- 16. McKenna H. Nursing theories and models. London, Routledge Essentials for Nurses, 1997.
- 17. Cavanagh S. Orem's model in action. London, The Macmillan Press Ltd, 1991.
- 18. Coldwell Foster P, Bennett A. Dorothea E. Orem. (chapter 7) In George, J. Nursing theories. The base for professional nursing practice. 4th ed. U.S.A., Prentice Hall International Edition, 1995.
- 19. Girot E. Discussing nursing theory. Senior Nurse. 1990, 10:16-19.
- 20. Malin N, Teasdale K. Caring versus empowerment: considerations for nursing practice. Journal of Advanced Nursing. 1991, 16:657-662.
- 21. Hardy ME. Theories: components, development, evaluation. Nursing Research. 1974, 23:100-107.
- 22. Lewin K. Field theory in social science: selected theoretical papers. New York, Harper and Brother, 1951.
- 23. Tappen R. M. Nursing leadership and management. Concepts and Practice. 3rd ed. Philadelphia, F.A. Davis Co, 1995.
- 24. Gillies DA. Nursing management. A systems approach. 2nd ed. U.S.A., Saunders Company, 1989.
- 25. Tiffany C, Johnson L. Planned change theories for nursing. Review, analysis and implications. U.S.A., Sage Publication. Inc, 1998.
- 26. Morrison M. Promoting the motivation to change. The role of facilitative leadership in quality assurance. Professional Nurse. 1992, 16:715-718.
- 27. Parrish A. Managing change. Nursing Management. 1996, 3:11.
- 28. Rogers E.M. Diffusion of innovations. 3rd ed. London, The Free Press. Collier Macmillan Publisher, 1983.
- 29. Barone S. On the demise of subjectivity in educational inquiry. Curriculum Inquiry. 1992, 22: 25-38.
- 30. Overtveit J. Evaluating health interventions. Buckingham, Open University Press Publication. 1998.
- 31. Donalson S, Crowley D. The discipline of nursing. Nursing Outlook. 1978, 26:113-120.
- 32. Benner P. From novice to expert. excellence and power in clinical nursing practice. California, Addison Wesley Publishing Company, 1984.