Therapeutic Instruments Used in Therapeutic Interventions: Is There Evidence In Nursing Care? A Systematic Review of the Literature

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ABSTRACT
Nursing development depends on clarification of terms currently used, but apparently with different meanings. That is the case of therapeutic interventions and therapeutic instruments. The present article tries to answer the following research question: “Which nursing interventions are considered therapeutic and what are their characteristics?” It was hoped that the meaning of therapeutic instruments would be achieved. A systematic review of the literature on nursing therapeutic interventions was done based on well known data basis through which were achieved 13 articles dated from 1993 to 2006. There is some degree of evidence of the use of therapeutic nursing interventions and general agreement on its meaning. Identified therapeutic instruments used by nurses in therapeutic interventions were: therapeutic letters, bathing and comforting care, humour, music, presence, mindfulness (cognitive therapy), therapeutic touch, information management and emotional management. The concept therapeutic instrument used in nursing needs maturation, justifying a concept clarification study.

Key words: therapeutic interventions, therapeutic instruments, nursing therapeutic instruments, nursing care
INTRODUCTION

The line of research “Knowledge and practice” of the Nursing Research & Development Unit to which the authors belong, aims at producing knowledge that deepens understanding of nursing care, through concept and value clarification as well as professional identity questions. Some of the authors are developing doctoral thesis centred in concepts such as partnership, humour, emotional management and comfort, trying to find the meaning they have as therapeutic instruments. This paper is a systematic review and represents the first part of the whole research aiming to clarify the concept of nursing therapeutic interventions. It will be followed by a second part on concept clarification.

The present stage of development of Nursing as discipline, though based on universally accepted concepts, e.g. person, health, environment, nursing care, needs further concept development. Studies on nursing practice use a variety of words that might have similar meanings, such as therapeutic instruments, nursing therapeutics, nursing techniques, nursing technologies and nursing actions and interventions (ICN 2005). The following question emerges: Is nursing care, by definition, always therapeutic? Or, in some circumstances, it might not be?

These questions justify searching not just the meaning of the terms therapeutic and instrument, but also nursing care.

Therapeutic - Therapeutic (2009), in every day language, means to attend, treat, relating to the treatment of disease or disorder by remedial agents or methods. The use of the term therapeutic in nursing means a way through to an outcome, mainly restoring wellbeing / health / quality of life. Since Papilau’s Interpersonal Relations in Nursing (1952) the nurse–patient relationship is highly valued as an essential part of caring. Therapeutic interventions are characterized by McMahon and Pearson (1998) as developing a partnership, intimacy, and reciprocity in the nurse-client relationship, caring and comforting, physical intervention, teaching, manipulation of the environment and alternative health practices.

Therapeutic relationship is commonly used in nursing, meaning the nurse-patient interaction, with a common aim, a process with several stages and defining attributes - negotiation, distance and boundaries, disclosure, confidentiality, trust, respect, empathy and power - (McMahon & Pearson 1998) mutual growth and increased autonomy of the patient (Chambers 2005).

Instrument - Common sense considers instrument (2009) a way whereby something is achieved, performed or furthered, a tool. It can be compared to music, produced by an orchestra, using different types of instruments. Clinical instrument has been used by Araújo, Oliveira, Picoloto, Magrinell, and Szupszynski (2004:76) (...) using dreams as a clinical instrument.

Nursing care - According to Meleis and Trangenstein (1994:257) and widely adopted from then on, Nursing care (...) is concerned with the processes and experiences of human beings, during transitions, where health and wellbeing are the outcomes. Nurses, in their practice, help the client to attain a feeling of being in charge, have a level of functioning and knowledge that will mobilize his/her energy (Meleis, Sawyer, Im, Hilfinger & Schumacker 2000). This is usually considered a therapeutic relationship which has been highly valued by nursing authors such as Watson (1998) and Watson and Foster (2003) who argue that nursing as a therapeutic activity, by itself, leads to its accreditation as a profession, implying that it is more than just doing things. Nursing therapeutics is used by Meleis and Trangenstein (1994) as part of the definition of nursing.

While trying to understand the meaning of “therapeutic interventions in nursing” the authors would like to find out what therapeutic instruments, if any, are used by nurses during therapeutic interventions.

RATIONALE FOR THE STUDY

Nursing literature generally argues that nursing care is therapeutic, as its outcomes are higher levels of well being and autonomy of the patient.
But, authors do not clearly state if they are reporting to idealized care, usually presented in classroom teaching, or if they are generalizing nursing practice in the real world. When the literature is explicit, it is clear that nursing care is not always therapeutic. Swanson (1993), when referring to Benner’s studies, reminds us that novice nurses can care for the well being of others but their repertoire of therapeutic instruments (caring therapeutics) is limited. Nurses therapeutic practices are based on nursing knowledge, related sciences, such as humanities, as well as personal insight and experiential understanding ... the aim of nursing care is to strengthen the well being of those they care for (Swanson 1993:354). Therapeutic relationship has been clearly separated from social relationship by Chambers (2005). Through conceptual analysis the author claim that nurses social relationship with patients have some therapeutic value, but on a superficial level, facilitating a therapeutic relationship, characterized by trust, respect, empathy and sharing of power. This confirms earlier classifications, such as:

- Nurses interventions: supportive and therapeutic (Levine 1973);
- Therapeutic nursing activities: nurse-client relationship, conventional practice, complementary therapies and client education (Hockey 1991);
- Therapeutic approach in nursing: create a therapeutic environment, give information, provide comfort and holistic health practices (Ersser 1988);
- Therapeutic nursing activities: partnership, intimacy; caring and comforting; evidenced based physical interventions; teaching; environment control; alternative health practices (Mc Mahon & Pearson 1998).

Aiming at giving a contribution to concept clarification, it was decided to do a systematic review of the literature to answer the research question “Which nursing interventions are considered therapeutic and what are their characteristics?” In this way it is hoped that a clarification of the meaning of therapeutic instruments will be achieved.

The path to knowledge development includes synthesis and interpretation of knowledge related to central concepts in nursing (Meleis 2005). One of the ways to achieve it is through systematic review of the literature (University of York 2009).

The systematic review of the empirical research literature on nursing therapeutic interventions, published over 15 years, 1992 to 2007, was conducted in several data bases. Criteria to select data bases were the most assessed by health professionals. The following were chosen: Medline®; Cinahl®; Proquest®; Bireme; Psycinfo; OVID; Pubmed; Ebscohost; Cochrane Controlled Trials Register and the search motors Vivisimo and Google. Key words used were therapeutic and nursing, therapeutic tools, nursing therapeutic interventions, nursing therapeutics, therapeutic care and nursing, therapeutic techniques and nursing.

Inclusion criteria were:

1) articles published from 1992 to 2007, in order to analyse a period of time where many changes in nursing took place
2) be published in Portuguese, English, French and Spanish 3) be pertinent to the topic, that is nursing therapeutic interventions.

First the titles and abstracts were examined using the inclusion criteria. The application of the inclusion criteria yielded 59 empirical study papers on the topic. In the second phase the full papers of 59 articles were reviewed against the inclusion criteria mentioned above. In this phase a total of 44 articles were excluded, mainly by lacking of scientific rigour.

In the third stage the articles were examined and classified according PICOS method - referring participants, interventions, outcomes and study – (University of York 2009). This method improves the reliability of the conclusion of this review. For the data discussion, relevant articles, dissertations and books were used.

Those 13 articles are dated between 1993 and 2006. The year 2005 had the greater number of articles. The majority was published in the USA (5), and the UK (4) followed by Brasil, Austrália, Canada, and Portugal, each with one article.

**METHOD**

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Regarding the study design, three systematic reviews of the literature were found, five quantitative studies (one experimental and one quasi-experimental), three qualitative studies (one phenomenological, one hermeneutic and one grounded theory) and two case studies. Studies on therapeutic toys and storytelling as therapeutic instruments could not be accepted, since they did not have methodological rigour.

RESULTS

From the analysis of the articles (13) identified in the literature search emerges:

- Studies showing that nursing intervention is therapeutic based on both process and outcomes. Therapeutic intervention includes education, support and repairing functions.

- Studies identifying therapeutic instruments used by nurses in a therapeutic intervention, their characteristics and efficacy being identified, such as: therapeutic letters, humour, music, mindfulness (cognitive therapy), therapeutic touch, information management, and emotional management. Associated outcomes are pain relief, relief of somatic symptoms, relief of depressive feelings and anxiety, facilitation the nurse-patient relationship.

- Articles that refer to therapeutic instruments such as bathing and comforting care, and presence, but do not show research has been done on them.

- Studies about nursing tools, such as assessment of nursing needs scales, not considered therapeutic instruments since they are not part of a therapeutic relationship, though they can be very useful to improve nursing care.

- Studies showing barriers to the use of therapeutic instruments in nursing, such as perceived low competence, lack of preparation to deal with complex situations, lack of resources (human and equipment) and environmental factors such as noise and temperature.

One study reveals that nurses seem to be adopting a non specific role, substituting other professionals or taking a managerial non-therapeutic role, though maintaining therapeutic caring interventions, such as hygiene, elimination, mental state and positioning.

The systematic review of the literature did not bring a straight answer to the research question “Which nursing interventions are considered therapeutic and what are their characteristics?” Scientific evidence is not always consistent and the terms therapeutic intervention and therapeutic nursing appear to have a similar meaning to therapeutic instruments. It is suggested that therapeutic instrument signifies a means to attain a therapeutic effect, mainly re-establish health.

The various therapeutic instruments used by nurses and referred to in the literature need to be furthered researched, in order to identify characteristics, outcomes and situations where they can be useful. The synthesis of the analysed articles is presented in Table 1.

Data Discussion

The following diagram (1) shows the list of the identified therapeutic instruments and the identified outcomes of their use, within a nursing therapeutic intervention. It also points out some of the identified barriers to the utilization of therapeutic interventions, specific therapeutic instruments and conditions allowing expected outcomes.


Partnership and intimacy allow the creation of a safe environment and freedom of choice. But in order to attain partnership, reciprocity is necessary. In a dynamic atmosphere, a contract is established and each actor feels in control of the relationship, using communication strategies. Similar thoughts have been conveyed by the well known French nursing author Collière (1999:152)

It is the relationship with the patient that becomes the axis of caring, meaning that it is simultaneously the means to know the patient and understanding what he is going through, having at the same time a therapeutic value. Bollander’s (1998) therapeutic relationship concerns a personal, patient centered relationship, geared to attaining mutual objectives.
### Table 1 – Studies reviewed about nursing therapeutic interventions

<table>
<thead>
<tr>
<th>Author/year/country</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcomes</th>
<th>Study</th>
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<tbody>
<tr>
<td>Beck 1997 EUA</td>
<td>Nurses</td>
<td>Twenty-one registered nurses enrolled in a graduate nursing program described in detail an experience they had using humor in providing nursing care. The 21 written descriptions were analyzed using Colaizzi’s phenomenological method.</td>
<td>Humor was found to: help nurses deal effectively with difficult situations and difficult patients; create a sense of cohesiveness between nurses and their patients and also among the nurses themselves; be an effective therapeutic communication technique that helped to decrease patients' anxiety, depression, and embarrassment and create lasting effects beyond the immediate moment for both nurses and patients.</td>
<td>Phenomenological</td>
</tr>
<tr>
<td>Burton 2003 UK</td>
<td>People with stroke medical diagnosis</td>
<td>A comprehensive review of electronic and other sources of research were then explored to identify components of the description of therapeutic nursing that have been subject to robust evaluation in stroke rehabilitation. Two studies were identified that met the inclusion criteria for this review.</td>
<td>Therapeutic nursing in stroke rehabilitation is a process that includes education and support to facilitate the development of psycho-social coping strategies to enable long-term recovery by patients. The studies explore different aspects of therapeutic nursing like effectiveness of a guided decision-making strategy in promoting perceptions of self-efficacy.</td>
<td>Systematic Review</td>
</tr>
<tr>
<td>Ciampone, Gonçalves, Maia, Padilha 2006 Brasil</td>
<td>Adult patients from a university hospital</td>
<td>To compare nursing care needs and therapeutic interventions of elderly and non-elderly patients admitted to an ICU, the Nursing Activity Scale (NAS) was applied daily, from the time of admission to and discharge from the ICU. Data were analyzed with descriptive statistics and Mann-Whitney tests.</td>
<td>No difference was observed between the mean NAS scores for elderly and nonelderly patients and, there was no difference between the therapeutic interventions carried out in the two groups of patients for example: Nurses’ presence near bed and continuous or active observation for 4 hours or more, in some shifts, laboratorial analyses, therapeutically administration and hygiene care are therapeutic interventions. A high number of patients had also the accomplishment of administrative and management tasks, tasks of routine, respiratory support; treatment to improve pulmonary function; familiar and patients support, evaluation of urinary debit and care with drains as therapeutic interventions.</td>
<td>Quantitative (Comparative)</td>
</tr>
<tr>
<td>Clarke, Parker, Goud 2005 Australia</td>
<td>Nurses</td>
<td>Use of a questionnaire adapted from Mental Health Problems Perception Questionnaire, to evaluate generalist nurses perception (n=344) about their therapeutic interventions efficacy with persons suffering from psychiatric diseases, in rural areas, and their educational needs in mental health issues.</td>
<td>Nurses refer not having lack of knowledge to have a therapeutic role to psychiatric patients. The perception of low competency and weak capacity to support, associated with low levels of therapeutic responsibility, are considerable barriers to give nursing care to this type of patients.</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Day, Horton-Deuttsch 2004 USA</td>
<td>Psychiatric patient (conversion disorder and major depression disorder)</td>
<td>Mindfulness-based approaches for all phases of psychotherapy; integration of mindfulness-based strategies in advanced practice psychiatric nurse led psychotherapeutic treatment of one patient. Includes focused attention on conscious thoughts, feelings and body sensations, thus preventing depressed mood that heralds the onset of relapse. Major assumptions and practices shared with traditional cognitive therapy.</td>
<td>The patient gained insight into her illness, her functional status improved, frequency and intensity other panic attacks diminished and continued engaged in therapeutic work. Maintained medication for depressive symptoms.</td>
<td>Case study</td>
</tr>
<tr>
<td>Author/year/country</td>
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<tr>
<td>Engle, Graney 2000 USA</td>
<td>Nursing students and nurses</td>
<td>In order to demonstrate short time effect of therapeutic touch, compared with placebo effects, 11 adults were subjected to therapeutic touch and mimic therapeutic touch, according to standardized protocols, in a controlled environment.</td>
<td>Pulse amplitude and perception of time decreased significantly immediately after intervention, showing vascular constriction in comparison with the response to placebo, contrary to expectations Therapeutic touch can have positive or negative effects</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Lewis 2002 United Kingdom</td>
<td>Man with aggressive behaviour</td>
<td>Group dynamics programme geared to rage management, combined with training of relaxation and social competencies, Identification of violence episodes through case recording, interviews, diaries, observation.</td>
<td>Rage management as a therapeutic intervention is no panacea for all forms of violence, but its preventive effect cannot be put aside.</td>
<td>Case study</td>
</tr>
<tr>
<td>Lopes 2005 Portugal</td>
<td>Nurses, patients and families</td>
<td>In order to understand the nature of the relationship nurse-oncology patients, on chemotherapy, in a day hospital, interviews - to five nurses and 10 patients and their families - a focal group with nurses, 10 admission interviews by nurses and 60 days observation were analysed</td>
<td>The “nurse therapeutic intervention process” includes all nurse led intentionally therapeutic interventions. In this process two instruments were identified: emotional management and information management.</td>
<td>Grounded Theory</td>
</tr>
<tr>
<td>Moules 2002 Canada</td>
<td>Therapeutic letters written by patients from one Family Nursing Unit</td>
<td>Examination of the nursing and family therapy intervention of therapeutic letters. Interpretation of 11 therapeutic letters, clinical sessions with families, clinical team discussions, and research interviews with family members and nurse clinicians who participated in the writing of the letters</td>
<td>Therapeutic letters to people experiencing illness at the point of their suffering, with words and questions invited relationship and reflection: “words can hurt and words can heal”.</td>
<td>Hermeneutic Research</td>
</tr>
<tr>
<td>O’Connor 1993 USA</td>
<td>Nurses</td>
<td>The aim of the literature review was to explore the nature of nursing interventions when caring for persons with CVA, and nurse’s role in the person’s rehabilitation.</td>
<td>Though persons with CVA have been very much researched and documented, this is little research on nurse’s specific role, and their therapeutic interventions with these persons. The literature shows nursing might be going in the direction of a management and support of other professional’s role and not in the direction of an autonomous profession with specialized, specific interventions within a multidisciplinary team. Therapeutic nursing care is centered on hygiene, elimination, incontinence and mental state care.</td>
<td>Systematic review of the literature</td>
</tr>
<tr>
<td>Slater, McCormack 2005 UK</td>
<td>Nurses</td>
<td>A systematic review of the literature was done in order to validate an instrument to assess old people’s needs in nursing care</td>
<td>The Nursing Needs Assessment Tool is valid and can be used as a tool to assess old people’s needs in nursing care. It facilitates sharing information within the multidisciplinary team, in order to promote old people’s well being and prevention of diseases.</td>
<td>Systematic review of the literature</td>
</tr>
</tbody>
</table>
Table 1 – Studies reviewed about nursing therapeutic interventions (cont.)

<table>
<thead>
<tr>
<th>Author/year/country</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcomes</th>
<th>Study</th>
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<tbody>
<tr>
<td>Smith, Casey, Johnson, Gwede, Riggin 2001 USA</td>
<td>Men between 30 and 80 years old are being treated with pelvic or abdominal external radiotherapy for malignant disease.</td>
<td>In order to determine how music can control patient’s level of anxiety, during radiotherapy sessions, the experimental group had musical therapy, while usual nursing care was given to the control group. All completed an anxiety scale (State-Trait Anxiety Inventory), in five separate moments.</td>
<td>No significant statistical difference exists between the two groups, allowing to say that music has an effect on anxiety, during radiotherapy treatment. But there are differences and tendencies in the data that suggest the possibility that musical therapy can have a beneficial effect during this type of treatment in people with high levels of anxiety, allowing nurses to use it as a therapeutic tool.</td>
<td>Experimental</td>
</tr>
<tr>
<td>West, Barron, Reeves 2005 United Kingdom</td>
<td>Nurses</td>
<td>In order to identify barriers to quality nursing and which aspects of care are more affected by lack of resources nurses (n=2880) from 20 London hospitals answered a questionnaire</td>
<td>Nurses considered having lack of time to give essential care to patients, such as talking to patients and collecting data. Main factors related to the problem are scarce human and equipment resources. Environment factors such noise and temperature also affects care and are not controlled by nurses.</td>
<td>Quantitative</td>
</tr>
</tbody>
</table>

Diagram 1 - Therapeutic instruments and outcomes of their use, within a nursing therapeutic intervention

- **Therapeutic Intervention** (McMahon & Pearson 1998)
  - Development of partnerships, intimacy and reciprocity in nurse-client relationship
  - Caring and comforting
  - Physical interventions
  - Teaching
  - Manipulate the environment
  - Alternative health practices

- **Functions**
  - Education, support, repairing, re-establishing wellbeing

- **Therapeutic Instruments** (Means to attain therapeutic interventions)
  - Letters
  - Humour
  - Music
  - Presence ??
  - Touch
  - Comforting ??
  - Bathing ??
  - “Mindfulness” (psychotherapeutic approach)
  - Information management
  - Emotional management

- **Outcomes**
  - Health and wellbeing (Meleis & Trangenstein 1994)
    - Pain / suffering relief
    - Relief of somatic symptoms
    - Relief of depression
    - Relief of anxiety
    - Increase in curiosity about the evolving context
    - Understanding procedures
    - Involvement
    - Increased interactions
    - Better nurse-patient relationship

- **Barriers**
  - Perception of low competency
  - Environmental factors
  - Insufficient resources
  - Lack of education to deal with complex situations
  - Adoption the role of other professionals or manager responsibility

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Nursing outcomes are difficult to identify and the trend is to increase the studies that try to identify outcomes sensitive to nursing interventions i.e. that can be related to nursing care. There is still much work to be done. But it is worth mentioning research led by nurses on human living processes. Shumacker and Meleis (1994) literature review identified three health indicators of a successful transition: emotional well being, mastery and wellbeing in relationships. Other indicators were identified, such as quality of life, adaptation, functional ability, self-actualization, expansion of consciousness and personal transformation.

It is not surprising that nurses intervene therapeutically, just like other health professionals, e.g. the cognitive behavioural approach.

It is recognized that therapeutic instrument is very poorly defined in the nursing literature as well as in the health literature in general. Even so, the expression is frequently used.

Some authors associate therapeutic instrument to alternative therapies (Rankin-Box 1993, Healstead & Roscoes 2002) as used by various therapists, including nurses, though the professional regulation differs from country to country.

CONCLUSION

The systematic review of the literature on nursing therapeutic interventions opens the way for nurse researchers to do concept clarification studies. Thus this review leads to the following conclusions:

- Clarification of concepts such as therapeutic intervention and therapeutic instrument is useful since both concepts can contribute to the recognition of nursing therapeutic potential.

- There is some degree of evidence of the use of therapeutic interventions in nursing and a general agreement on its meaning.

- The concept therapeutic instrument used in nursing needs maturation, justifying a concept clarification study to identify its characteristics and outcomes.

REVIEW LIMITATIONS

There are some possible limitations in this study. The search terms used may be criticised. The study period may have restrained the number of empirical studies, however it is necessary procedure.

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