Structure of professional autonomy acquisition of nurses involved in cancer lymphedema care
− From a group interview with nurses in charge of the lymphedema specialist outpatient units

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Abstract

The aim of this study was to clarify nurses understanding of existing structures and nursing roles in Japan and enhance performance levels through development of a structured system to help nurses with the acquisition of professional autonomy.

Participants were five nurses, with over 6 years clinical experience, in charge of an outpatients department specializing in lymphedema at a University hospital. A group interview was conducted in February 2012. The interview was conducted in a specially prepared room at the hospital. The interview was recorded and later transcribed and edited for coding and analysis. From the edited data, researchers’ extracted 86 codes. This data was analyzed into 20 sub-categories then placed into 5 main categories. Researchers produced a visual representation of the most significant areas of concern and a structured approach to assist nursing development.

The results will allow for a more focused method of education and training, significantly improving the development and effectiveness of nurses offering genuine benefits in its application to clinical nursing care.

Key words: autonomy, development, lymphedema, specialist, structure

Introduction

Career development of nurses has the capacity to achieve a deepening of professionalism and to improve potential in areas such as the acquisition of professional autonomy¹. Definition of the profession is not yet clear according to many professional researchers². Professional autonomy for nurses can be greatly enhanced if the subject is addressed discreetly within the continuous learning process of the profession together with the daily activities carried out in nursing practice.

Current education of nurses is complex with nurses
feeling particularly vulnerable in their understanding of areas such as legal issues and policy. This complexity and vulnerability is further compounded by the overall ambiguity of education and diversity of duties carried out by nurses. This has remained a problem for some time and researchers have, in part, attempted to clarify certain areas of professionalism and autonomy.

Research considered the main attitudes that characterize the profession of nursing and how they affect professional autonomy concluding that it was feasible to introduce a structure that would clarify many areas and assist in improving attitudes within the profession. Studies on professional autonomy of nurses, from the early 1970s, mainly conducted in the United States, showed a shift in styles and attitudes that focused on areas such as vindication of patient’s rights and of nurses becoming more autonomous and taking initiatives. Following on from this in the late 1990s, researches into personal factors related to professional autonomy were explored. Validation studies, on the effect of organizational support and professional autonomy have helped advance these areas. However studies to investigate the effects on Japanese participants (nurses) have not been made. Additionally, whilst patient outcomes in Japan have been reported, evaluation of nurse’s outcomes, have not.

For nurses working in lymphedema specialist outpatient units, there is a great opportunity to experience a range of factors including, decision making and the impact of professional autonomy. It’s an excellent environment in which to experience the importance of “clarity” on the acquisition of professional autonomy and the impact this has on nursing staff and patient care. The aim of this study was to clarify nurses understanding of existing structures and nursing roles in Japan and enhance performance levels through development of a structured system to help nurses with the acquisition of professional autonomy.

**Method**

Participants were 5 nurses in charge of the outpatient lymphedema specialist unit at a University hospital who had over five years’ experience of organization/management nursing and over 6 years’ experience in clinical nursing (Table 1).

The persons in charge of all lymphedema specialist outpatients unit at a Hospital School of Medicine were selected with a principal researcher acting as an advisor. Informed consent was obtained from all participants and was confirmed using an IC recorder on the first day of the research to ensure all participants understood and agreed to the research.

The survey was conducted in conference rooms at the location. Writing utensils and IC recorders were available and a supplemental interview guide was prepared in advance for use by the interviewer.
Table 2  Sample of initial interview questions

1. Please provide the following information:
   - Years of nursing experience
   - Years of service in the outpatient lymphedema unit
2. Please tell us about your background in being involved in the outpatient department
   - Recommendation from your boss?
   - Waited for a vacancy? voluntarily?
3. What was your most satisfying part of working in the outpatient department?
   Please be specific
4. What was the most difficult part of working in the outpatient department?
   Please be specific.
5. How did you cope when you were having difficulty in judgment?
   Please be specific.
6. Please tell us what you felt and what role, in your view, is important as a nurse in the outpatient department.
7. Please tell us if there are any concerns and anxieties. For example;
   - Anxiety that the patient’s care had been sufficient
   - Concerns and anxiety felt in the midst to the nursing activities
8. Please tell us specifically, what made you decide to work in this area?
   - Job Satisfaction
   - Competence
9. Was this an easy transition or have you had difficulties?
   Please be specific.
   - No change in experience or feeling
   - Increased experience resulting in something worthy to you?
10. Were you able to work in other areas concurrently and how did your colleagues react?
11. Please tell us about your aspirations.
   - Did you achieve any of these aspirations?

Interviews were conducted by the researcher in a relaxed and comfortable atmosphere encouraging the participant to speak freely. The interview records were used for analysis and observational records were kept to use as validation of the interviews.

Data from group interviews was collected. The group was interviewed once (2 hours) in February 2012 with a follow-up interview taking place in May 2012. Group discussion was related to autonomy, professional issues and responsibility. Interviewers were aided by an Interview guide (Table 2) based on previous research, “Clinical Wisdom & Interventions In Critical Care”5. Interviewers prompted participants with additional questions looking for responses that would show characteristics that can be decision-making on the basis of human values as a professional/professional autonomy, making decisions and taking responsibility for them (Table 3).

Following the recorded interviews the data was transcribed and edited ensuring that none of the original context was in any way impaired.

A follow-up survey was conducted in order to investigate the suitability of the data and the nature of the participants. The questionnaire measured participant impressions and any change regarding professional autonomy.

A follow-up questionnaire, self-administered was given 3 months after completion of the original research. After editing, the data was coded. The qualitative data was coded by 2 researchers working in parallel with the edited data who, on completion, combined the scores for classification. According to similarity of meaning, this data was worked up into sub-categories which were then placed into categories. Extreme values were not included.

The criteria for weighted information were set as described in previous studies7. For final classification it was decided that the priority was to extract data from Class A to Class D. As a result of this extraction the data was adopted from Class A and Class B. The data of Class C and Class D was used as reference of analysis (Table 4).

Within the narrative, events and/or keywords that were mentioned by over 50% of participants were
subsequently weighted using the B-rank weighting criteria.

**Ethical considerations**

The research was approved by Ethical Review Board and conformed to the Helsinki declaration of 1995 as revised in Edinburgh 2005. Participants were given full explanations regarding the publication of the results; participant’s freedom to stop at any time and assurances of confidentiality and their written informed consent was obtained.

**Results**

A total of 86 codes were extracted from the data which were placed into 20 sub-categories according to similarity of contextual meaning. From this, researchers were able to further clarify the data into 5 main categories related to the participant’s interpretation of job role, responsibility, areas of conflict/concern and notion of autonomy (Table 1). A detailed definition of the 5 main categories is shown in the Table 5.

A clear visualization of the five categories, related to the acquisition of nursing professional autonomy has been found from this study (Fig. 1).

The nurse in charge of the outpatient department initially shows their interest in “Self-interest in the power of technology (experience)” which enables them to achieve “The goal of patient satisfaction”. Gradually they begin to perceive the idea of personal factors related to the patient (lifestyle, family structure, individuality, etc.) acquiring a better understanding of complex physiotherapy needs. It is necessary to view the patient as a whole person which increases awareness of “Understanding of self-interest in others”. Through this experience they become better aware of the significance of outpatients and of the importance of self. This further develops the nurses “Awareness of responsibility as a professional”. Finally they achieve “Convinced of the power of nursing” which consists of the best parts of nursing such as respect, gratitude and pride, changing the general workplace culture.

One distinctive outcome from this study was that we were able to clearly define factors affecting awareness of responsibility in gaining professional autonomy.

**Discussion**

In Japan nurses working in a culture based on authoritarianism would encounter a variety of conflict

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Table 3  Themes related to the acquisition professional autonomy of nurses

<table>
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<tr>
<th>Category</th>
<th>Sub-category</th>
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| Self-interest in the power of technology (experience) | • You want to do something about the patient’s pain  
• Gain experience of difficult cases  
• Feeling of achievement |
| Understanding of self-interest in others | • Perform self-care & give motivation  
• Understanding the patients feelings  
• How the treatment affects the patient |
| The goal of patient satisfaction      | • Patients feeling of achievement  
• policy dilemma facing the patient’s desire and hospital policy  
• solution according to the patient |
| Awareness of responsibility as a professional | • Aware of the significance of the outpatient unit  
• Aware of the significance of the existence of the self as a nurse  
• Responsibility for treatment  
• Responsibility for changing salaries  
• Ability to developed and gain experience |
| Convinced of the power of nursing     | • Best part of nursing  
• Openness from the doctor’s instructions  
• Respect for the importance of an outpatient system  
• Nursing process is a powerful tool  
• Pride in their work  
• Understanding of specialist-oriented workplace culture |
Weighting of information according to frequency (Episodes expressed by participant)

❖ Class. A: Episode that is extracted from all participants
❖ Class. B: Episode that is extracted from more than half of the participants
❖ Class. C: Episode that is extracted from less than half the participants
❖ Class. D: Episode that is extracted from participants more than once

Depending on the strength of cross-participant agreement the rank weighting can be raised or lowered factoring in the frequency of occurrence.

Table 4 Weighted data: Class A, B, C, D

<table>
<thead>
<tr>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
<th>Class D</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>Episode 1</td>
<td>Episode 2</td>
<td>Episode 3</td>
<td>Episode 4</td>
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Table 5 Definition of the 5 main categories

1) "Self-interest in the power of technology (experience)"
A desire to improve their skill-set and capabilities through experience in dealing with lymphedema outpatients in a clinical environment. From this, sub-categories such as helping patients with pain management, dealing with difficult situations and a greater sense of satisfaction for the nurse through the quality of care that they are able to provide.

2) "Understanding of self-interest in others"
Nurses ability to help and support the patient in understanding their condition and being able to introduce self-care techniques not only complex physiotherapy but also individual lifestyles. Sub-categories include: motivation to continue self-care, learn from the patient, to be with/support the patient. The nurses benefit by gaining a greater understanding of the patient in areas such as motivation, pain, suffering, anxiety, etc. This all helps to improve the nurse’s ability to offer a greater level of continued self-care support. The outpatient clinic serves as an environment to help patients reduce anxiety and interact with others, something they otherwise may not have been able to do. This interaction also helps nurses to clarify the patient’s precise requirements.

3) "The goal of patient satisfaction"
Patient satisfaction with sub-categories including: my satisfaction as a nurse is a reflection of the patient’s satisfaction, dilemma of conflict between patients wants and hospital policy, methods for effective problem solving. Nurses often experience a dilemma when the patient’s wants/wishes are in direct conflict with hospital policy. This is especially noticeable in patients who are end-stage terminally ill and visit the clinic with specific wishes which cannot, according to hospital policy, be fulfilled. In these cases nurses can only offer relief from pain, in terms of care although they would like to do more. Nurses can design lymphedema care as palliative care.

4) "Awareness of responsibility as a professional"
Nurses awareness of the range of responsibilities needed in the outpatients department. "Awareness of the significance of responsibilities" was set as a pre-condition for a better understanding of other sub-categories such as "treatment" and "earnings". This greater awareness allows for better overall understanding of responsibilities. This gave nurses a much greater understanding of each of the responsibilities in all areas and significantly contributed to their understanding and ability to develop. Prior to this clarity, many areas such as patient suffering, individual differences, etc. had gone unnoticed by the nurses. It’s important to note that this “awareness of responsibilities” is new in Japan and education given to nurses does not include such a wide range of factors.

5) "Convinced of the power of nursing"
"Belief in the power of nursing" is achieved through education and experience supporting the nurses in a greater awareness of openness, autonomy, responsibility, etc. For example, in the sub-category "The best part of nursing" nurses begin to better appreciate the importance of the type of care provided and the job-satisfaction this gives. "Openness from doctor’s instructions" allows nurses to show their ability and increase confidence not only in their own skill set but also improves how they are perceived by the doctor. Gaining awareness of responsibility offers the nurses a greater sense of autonomy and gives them an increased feeling of pride in their work. This ultimately resulted in better acceptance from colleagues and began to improve the work-place culture.
areas and as such would develop evasive behavior patterns such as not talking about their role and responsibilities and avoiding any potential conflict with doctors\(^9\). Initiatives as a professional, responsibility for protecting patients against hospital policy are low\(^10\). However there are few reports on autonomic recognition/responsibility comprehension as a professional. This indicates a low level of understanding regarding responsibilities and role as a professional within the nursing community in Japan, with a background of ambiguity related to roles and responsibilities a problem that is compounded by the current law in Japan. Working within the definitions of the law, diagnosis and treatments are as a result of the doctor’s direction and leave little room for nurse’s autonomy. This creates a conflict in Japan. However more recently, differentiations in higher education and basic nursing education has seen a move towards placing more emphasis on defining roles and responsibilities with a view to increasing professional autonomy in nursing practice. But working within current laws means that this aim is never likely to be achieved and remains a complete Contradiction.

This study shows that although the law remains stagnant actual practice and behavior is indeed moving towards this goal in advance of the law. As a consequence, nurses in charge of the lymphedema specialist outpatient departments are in fact adopting a style that is more autonomous and responsible. Consequently, as pointed out by previous researchers\(^11\), greater autonomy by nurses is more widely considered. Autonomous practice implies accountability which entails personal and professional responsibility.

In this study on the development of the ability of nurse practitioners, professional autonomy has been isolated and clearly defined into the factors related to the practical abilities of mid-career nurses. It is thought that nursing autonomy, which is difficult to acquire, is the key to the plateau phenomena\(^12\). Historically, in order to take responsibility of role function it was important that nurses were given authority and encouraged to be autonomous\(^13\).

The strategy for giving nurses positions of power in order to acquire the autonomy is theoretically possible. However, in practice it is not possible due to the lack of available positions for nurses in the profession. The results of this study suggest that the development of expertise for nurses in charge of the lymphedema specialist outpatient units is essential if we are to acquire autonomy and prevent the plateau phenomena.

Professional autonomy is not dependent on many years of experience\(^14\). Professional autonomy is difficult to acquire party because the traditional patterns of
duties are very limited. The idea of a specific type of nursing role has been discussed but is only conceptual at the moment. The results of this study further suggest that with more flexibility the nurse’s role can include the opportunity to expand their knowledge base and expertise even if they are not certified or a specialist. However, roles under current statutory law are difficult to clarify, as such, nurses are not fully utilized. It is essential that general nursing practitioners are given the opportunity to make full use of their roles and abilities. We should pave the way for this change in attitude and then further discuss professional autonomy.

Professional autonomy is related directly to the job satisfaction of nurses. “Degrees of freedom” on job performance/role (Job Characteristic Model) leads to job satisfaction of employees[14]. Motivation and job satisfaction is directly related to “degrees of freedom” within the profession. Nurses need to be given a greater awareness of the opportunities for development available within the profession and how to best exploit these opportunities. This information needs to be given to all types of nurse, not only state registered and specialist nurses. There needs to be a much broader and detailed method of education for the profession.

Participants in this study expressed a range of concerns but the data (including the follow-up questionnaire) highlighted 3 points in particular; 1) All participants felt that the 5 main categories proposed by the researchers were highly significant. 2) A clearly defined, visual structure (Fig. 1) of the process is invaluable. 3) Opportunities for self-development and expanded, specialized training were necessary if autonomy is to be achieved. In clearly defining this structure researchers hope to contribute in to the development of nursing practice, providing information not only on “what” needs to be achieved but also on “how” it can be achieved.

The results from this study show that nurses working within the outpatient unit did benefit and gained a much clearer understanding of issues related professional autonomy. The results suggest that a wide range of mid-level nurses would also benefit.

**Limitations**

Participants in this study were all nurses working in the same hospital. This may affect validity of the generalization of data results. However, this issue was addressed with the follow-up questionnaire. In Japan, it is easier for people to speak more openly and frankly when they are with other people who they know as shown in previous studies[8]. However, because data was taken from participants with similar experiences there is a limit to the generalization of the data.

Researchers also acknowledge that the sample size was small and that a much larger sample would increase the significance of the research results. However, the overall qualitative data that was collected did display similar trends to those found in other studies.

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**References**

がんリンパ浮腫ケアに携わる看護師の専門職的自律性獲得の構造
−リンパ浮腫専門外来を担当する看護師へのグループインタビューから−

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要 旨

本研究の目的は、がん術後リンパ浮腫ケアに携わる看護師の専門職的自律性の構造を帰納的に明らかにすることにした。研究対象者は、大学病院でリンパ浮腫外来を担当する6年以上の臨床経験のある看護師5名とし、グループインタビューを2012年2月に行った。個室にて、インタビューガイドを用い半構成的面接によりデータを収集、質的帰納的に分析した。その結果、エピソードは86コード抽出され、そこから20サブカテゴリーに類型化され、最終的に5カテゴリーがテーマとして形成された。さらに得られたカテゴリー間の関係を検討した結果、看護師の専門職的自律性獲得の構造を示すことができた。特化した技術を専門分野とすることが看護師の専門職的自律性の獲得に有用であることが示唆された。

キーワード：自律性、開発、リンパ浮腫、専門家、構造