Nurses’ Management of Condition Changes in Elderly Residents in South Korean Nursing Homes: Concept development

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Abstract

This study used a qualitative approach and a hybrid method to determine the definition, dimensions and attributes of condition changes in nursing home residents, and to conceptualize care for effective management practices of nurses. In the first step, problems related to condition change which frequently occurred in nursing homes were identified through interviews with nursing home nurses. In the second step, concept analysis on nurses’ management of residents’ condition change in nursing homes using the hybrid model method was executed. This step involved the following three phases:
the theoretical phase, the fieldwork phase, and the final analytic phase. From the preliminary interviews, major condition changes of the residents in nursing homes can be categorized into total of 5 categories (cardiac problems, central nerve system problems, metabolic imbalances, infection problems, and organ obstruction problems) and 18 subcategories. Based on the findings from the theoretical and fieldwork phases, management of condition changes in nursing home residents was defined as an active process performed under time pressure and was comprised of three dimensions with several attributes. This study will affect nursing decisions in the management of emergency circumstances and could be utilized for building protocols for condition change or practice guidelines development.

**Key Words**: concept development, hybrid model, condition changes, nursing home, elderly.

1 INTRODUCTION

THE PERCENTAGE of people age over 65 in South Korea will increase to 13.1% in 2015 and is expected to reach 40.1% in 2060, showing acceleration to the Aging Society (Korea National Statistical Office, 2013). The need for a national level of change in medical welfare policy for the elderly led to the introduction of the 'Korean Elderly Long-term Care Insurance System' in 2008. The number of nursing homes in South Korea only amounted to 641 in 2007, but leapt after 2008, with the introduction of the Long-term Care Insurance System. The number multiplied 7.4 times to 4,766 in the first half of 2014 (National Health Insurance Service, 2014).

92.7% of the people using nursing homes in South Korea is aged over 65 and 54.4% of the group are estimated to have chronic diseases such as dementia or stroke (Ministry of for Health, Welfare, and family affair, 2009). The frail elderly with multiple chronic diseases has declining physical conditions that they are more prone to emergency situation (Tabloski, 2010; Uhm and Sung, 2009). Therefore, the risk of poor prognosis of the frail elderly is higher in emergency situations and the competency of nurses in nursing homes and the emergency nursing management of the elderly is critical.
This will consequently affect the patients’ safety and the quality of nursing homes. However, nursing homes in Korea do not have residing doctors and lack nursing staffs. Thus, the absence of guidelines or protocols results in delayed response and hinders adequate treatments. Moreover, conditions of the elderly usually show atypical aspects that it is difficult to identify. In order to deal with such problems, identifying condition change which alerts emergency situations should be preceded. However, the concept for nurses’ management of residents’ condition change in nursing homes is not clear and lacks theoretical basis. The related studies are mostly about criteria on transfer to the Emergency Room (ER) in case of emergency (Terrell K, Miller, 2011; Murray and Laditka, 2010) or focused on emergency care in nursing homes (Aizen et al., 2014; Ren et al., 2014). The study on identifying initial condition change related to emergency situations is rare. Lim (2010) made a novel approach in developing a ”Decision Making Supporting System” for condition change concerning vital signs of residents in nursing homes in South Korea. Lim (2010) suggested broader study related to nursing management including condition changes that is associated with symptoms other than vital signs. This will serve as a ground for building body of knowledge or theory for condition change, which is a preceding stage for emergency situation in nursing home.

Since the clarification of concepts is the initial stage of the scientific process when it comes to constructing theories (Kim, 2010), this study developed a concept for nurses’ management of residents’ condition change in nursing home.

Effective nursing management skills must be developed so that nurses can quickly detect early signs and symptoms indicative of imminent catastrophic events. Moreover, it will offer standards for proper and timely nursing management in nursing homes when above events occur and help protect patients’ safety.

Therefore, this study was undertaken to clarify and conceptualize the definitions, dimensions, attributes, and structures of effective management practices by nurses when condition changes in elderly nursing home residents were observed.
2 MATERIALS AND METHODS

The theoretical analysis of the nurses’ management of the resident’s condition change in nursing homes consisted of two steps.

A. Preliminary interview

1. Sample

Nurses in nursing homes were interviewed to share specific experiences and examples on problems which frequently occurred and prompted emergency situations in nursing homes.

2. Study setting and subjects

Thirteen nursing homes in South Korea were initially selected considering regional characteristic and size. However, two institutions declined to participate with the research, reducing the number to eleven institutions, totaling 34 participants, which data were collected from.

3. Data collection

The data was collected from 2010 Jun to July. This study acquired approval from the Institutional Review Board of Korea University to prove there weren’t any unethical invasion during the process of data collection and to guarantee the ethical approach of the participants’ management in the data collection phase (KU-IRB-10-15-A-2). In order to acquire cooperation from all nursing homes in Korea, nursing homes were analyzed and selected according to their size (fewer than 10 residents, 10-20 residents, 30-100 residents, and more than 100 residents) and the region (Seoul, Gyeonggi, Gangwon, Gyeongsang, Chungcheong, Jeolla, and Jeju).

Consents of cooperation from the person in charge of the nursing homes and consents for interviews and investigations were acquired. Moreover, in order to collect data for the residents of the nursing homes, permissions that the materials will be used for the purpose of research were received.

4. Data analysis

All interviews were recorded in MP3 files and transcribed by the researchers. All problems which cause emergency situations in nursing homes were aggregated and classified. The frequency of the referrals from the interviews was counted. Those problems referred more than five times were classified as ‘condition changes in elderly nursing home residents’ and were re-categorized as in [Table 1]. Finally, the analyzed results were verified by the participants to
confirm whether there should be any addition or omission.

TABLE I

<table>
<thead>
<tr>
<th>Categories</th>
<th>Key words</th>
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<tbody>
<tr>
<td>Cardiac problems</td>
<td>Heart, heart problems, cardiac arrest, heart failure, arrhythmia, angina, MI, condition change</td>
</tr>
<tr>
<td>Central nervous system problems</td>
<td>Stroke, paralysis, parkinsonism, condition change</td>
</tr>
<tr>
<td>Metabolic imbalances</td>
<td>Hemorrhage, dehydration, hyperglycemia, hypoglycemia, electrolyte imbalance, condition change</td>
</tr>
<tr>
<td>Infection problems</td>
<td>Pneumonia, Upper respiratory infection, Urinary tract infection, cellulitis, sepsis, condition change</td>
</tr>
<tr>
<td>Organ obstruction problems</td>
<td>Enterostenosis, intestinal obstruction, ileus, cholelithiasis, condition change</td>
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**B. Hybrid model method**

The research questions were studied by applying the three phases of the hybrid model for a concept development. This method is oriented to develop concepts through qualitative investigation using participant interviews and observation of phenomena taking place in situation (Schwartz-Barcotte and Kim, 2000). This study involved the following three steps: the theoretical phase, the fieldwork phase, and the final analytic phase.

**1. Phase 1 (Theoretical Phase): Literature review of condition change**

In the theoretical phase, conceptual definition and dimensions of nurses’ management of residents’ condition change was developed. The condition changes of nursing problems were found to lead to emergency situation in nursing homes according to the interviews. The literature review and definition were studied to concretize conceptual definition and determine the intrinsic dimensions and attributes of the management. The literature review was searched between 2001 and 2010 based on PubMed, Ovid, National Assembly Library, and Korea Education and Research Information Service (KERIS). Domestic and overseas literatures were searched by areal the key words shown in [Table 1]. Out of 1164 literatures, total of 769 that were directly related to the research theme which were
selected and analyzed.

2. **Phase 2 (Fieldwork findings): Identifying dimensions for nursing management of condition change in fieldwork phase**

   In the field work phase, data were collected via in-depth interviews with participants. These data were collected from 2010 July to August. The research institutions and the participants were 34 nurses from eleven nursing homes, selected by region and size from the preliminary interviews. Approach for development of knowledge was based on the theory in practice conceptualization by Kim (2010). This study identified how the nursing home nurses recognized condition changes of the residents before nurses managed emergency situation. The development of the knowledge approach was based on the theory in practice conceptualization approach by Kim (2010). This approach verified how nursing home nurses identified condition changes in residents before managing the change. The scope of analysis was 1) deliberation dimension, which determines scope of management for condition change in nursing homes, and 2) enactment dimension, which verifies obstructive factors in practice nursing when managing condition change. The study was done by stating practice knowledge of managing condition change of the residents in nursing homes.

   The method of this study used conventional content analysis, which is one of the qualitative research methods in understanding phenomenon. Content analysis analyzes expressions that describe facts in detail and helps find intentions of the participants. This study set semi structured interview guidelines based on the purpose of the study, then analyzed participants’ interview data.

3. **Phase 3 (The final analytic phase): Conceptual delineation through integration of the literature data and the fieldwork results**

   In the final analytic phase, the definitions dimensions, attributes, and structure derived from the theoretical phase and the analyzed data from the field work phase were synthesized and analyzed. The conceptual definitions, dimensions, and attributes of nurses’ management of residents’ condition change were deducted.
3 RESULTS

A. Preliminary interview: Defining nursing problems related to condition changes of residents in nursing homes

From the preliminary interview, major condition changes of the residents in nursing homes were categorized into total of 5 categories and 18 subcategories. These categories are as shown in [Table 2] and are as follows; 1) cardiac problems, 2) central nerve system problems, 3) metabolic imbalances, 4) infection problems, and 5) organ obstruction problems.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
</tr>
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<tbody>
<tr>
<td>Cardiac problems</td>
<td>Angina</td>
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<td></td>
<td>Myocardial infarction</td>
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<td></td>
<td>Cardiac arrest</td>
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<td>Central nerve system problems</td>
<td>Stroke</td>
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<td></td>
<td>Seizure</td>
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<td></td>
<td>Parkinson’s disease</td>
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<td>Metabolic imbalances</td>
<td>Blood glucose imbalance</td>
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<td></td>
<td>Internal hemorrhage</td>
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<td></td>
<td>Dehydration/ Electrolyte disturbances</td>
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<td></td>
<td>Pneumonia</td>
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<td>Infection problems</td>
<td>Urinary tract infection</td>
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<td></td>
<td>Local pain</td>
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<td></td>
<td>Abdominal pain</td>
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<tr>
<td></td>
<td>Airway obstruction (Foreign Body Aspiration)</td>
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<td>Organ obstruction problems</td>
<td>Airway obstruction (Airflow limitation)</td>
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<td></td>
<td>Intestinal obstruction (Ileus)</td>
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<td></td>
<td>Urinary tract obstruction</td>
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<td></td>
<td>Biliary obstruction</td>
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B. Hybrid model method: Deriving nurses’ management of condition change of residents in nursing home

Though a hybrid model, nurses’ management of residents' condition change in nursing home showed results as follows.
Phase 1 (Theoretical Phase): Literature review of condition change

1) Defining definition of managing condition change in nursing home in theoretical phase

Five categories of condition change derived through preliminary interviews were confirmed in this phase. In the literature review, specific categories such as cardiac problems, neurological events, metabolic imbalances (e.g., dehydration or low glucose), infection problems, and organ obstructions were identified as the physical origins of acute condition changes for the frail elderly. For each of these categories, older nursing home residents appeared to be at higher risk, and it was suggested that nurses should manage each event within these categories with a decision to transfer to the ER.

The following nursing problems and condition changes were of particular relevance to researchers exploring emergency management in nursing homes. Firstly, a typical example of cardiac diseases was a chest pain complaint associated with or followed by changes in level of consciousness and obvious arrhythmia (Daamen et al., 2010; Cwinn et al., 2009; Terrell et al., 2009; Becker et al., 2003). Secondly, a major physical origin of acute condition changes was stroke, which is also termed as cerebral vascular accident (CVA), and a seizure which is most commonly presented as a sudden neurologic deficit. Nursing researchers have been interested in the phenomenological aspects of neurological emergencies in nursing homes (Cowman et al., 2010; Cwinn et al., 2009; Godden and Pollock, 2001). Thirdly, problems related to metabolic imbalances such as dehydration, edema, and hypo/hyperglycemia are emergent events typical of elderly residents and are associated with significant morbidity and mortality in nursing homes. Each of these may lead to further complications and potentially lead to a downward trajectory of illness in the elderly patient, particularly the frail (McCloskey, 2011; Remington and Hultman, 2007; Bowman et al., 2001). Fourthly, nursing practice principles for infection control in nursing homes have been of interest to nursing researchers (Heffner et al., 2010; Mathe et al., 2007). Pneumonia and urinary tract infections account for considerable nosocomial infections in long-term care facilities (Depuydt et al., 2011; Boockvar et al., 2005; Aizen et al., 2001). Finally, obstructions due to objects or physical twisting of canals of major organs (e.g., respiratory tract, urinary tract, or
digestive organs) are emergency situations in nursing homes. In particular, choking due to obstruction of the respiratory tract by food during mealtime is a common respiratory distress in nursing homes and an extreme emergency situation (McCloskey, 2011; Leung and Rao, 2009).

2) Defining dimensions and attributes for management of residents’ condition changes in nursing home

From the literature review outlined above, we identified three dimensions of how nurses in nursing homes manage condition changes indicative of catastrophic events, including the nurses’ deliberations and actions in emergency situations.

2-1) Categorizing residents with radical condition change according to the patients’ status to minimize damage in major organs

The literature suggests that if the CABs (circulation, airway, and breathing) are normal, a history taking is needed to determine whether the patient has any medical conditions (such as arrhythmias or diabetes) or takes any medications (particularly anti-hypertensive, anti-coagulants, or hypoglycemic medicines). If a resident’s symptoms are related to his/her cardiovascular system, a 911 call and preparations should be made to initiate cardiopulmonary resuscitation (Brown et al., 2011).

Based on the individual immediate ischemic event risks, patients are categorized according to a prespecified algorithm under the acronym of PAIN (Priority risk, Advanced risk, Intermediate risk, and Negative/low risk) (Saint-Jacques et al., 2005). Intracerebral hemorrhage is a medical emergency. It is the most deadly and disabling form of stroke and no individual therapy has been demonstrated to improve outcomes. Airway management and the management of blood pressure aimed at maximizing cerebral perfusion while minimizing ongoing bleeding, as well as rapid reversal of anticoagulation, are likely to be important in the early phase (Goldstein and Gilson, 2011).

2-2) Mode of management: ensuring the safest and the most appropriate course of action in assessing, managing, and determining whether to transfer to the ER

Patel et al (2008) described "The dynamic and distributed work environment in critical care requires a high level of collaboration among clinical team members and a sophisticated task coordination system to deliver safe, timely, and effective care". This study
suggested that in any emergency, assessment should start with the CABs.

Montgomery and Mitty (2008) suggested that when change in vital signs, delirium or edema, bleeding, falls, chest pain, medication error, constipation/diarrhea/emetesis, pain, dehydration, pressure ulcers/skin rash, depression/suicidal ideation, seizures, visual changes, shortness of breath occurs, residents be transferred to ER. One should focus on residents’ safety, effectiveness and timeliness of these transitions, and ways to enhance resident-centered care when transferring residents from nursing homes to hospitals (Murray and Laditka, 2010). Moreover, statewide transfer form, a checklist, and verbal communications are strategies to improve care while transferring residents from nursing homes to hospitals (Terrell and Miller, 2011).

2-3) Identifying possible origins of radical condition change considering the residents’ co-morbidities, frailty, and characteristics of disease

Cardiac ischemia and infarction are the primary causes of chest discomfort and death in people over 65 years (Brown et al., 2011). Less commonly, pneumonia with increasing respiratory problems or GI troubles may also cause chest discomfort (Tabloski, 2010).

Geriatric emergencies involving the abdomen typically arise from infectious or inflammatory disorders, such as cholecystitis and diverticulitis, or mechanical conditions, such as bowel obstruction, ulcers, and cancer (Marco et al., 1998). A patient’s abdomen may be tender or rigid. However, the classic signs and symptoms of abdominal pain and fever may be masked by mental changes, tachypnea, or urinary urgency and frequency (Gray-Vickrey and Colucci, 2016).

2. Phase 2 (Fieldwork findings): Identifying dimensions and attributes for nursing management of condition change in fieldwork phase

According to the fieldwork analysis, nurses reported diseases or symptoms as major indicators of acute condition change which were also described in the literature: cardiac problems such as cardiac shock, neurological events such as stroke, hematological homeostasis imbalances such as dehydration or low/high blood glucose levels, infections such as pneumonia, and obstruction of major organs such as asphyxia.
In most cases, nursing homes responded with protocols that involve continuous monitoring and fast transfer to the ER. Regarding emergency situations due to cardiac problems, nurses stated that intervention is a primary strategy for maintenance and restoration of heart function to promote blood supply to the entire body. In cases of neurological events, their actions were geared towards preventing possible re-attack and more serious damage to the central nervous system. In hematological homeostasis imbalance, nurses were mainly concerned with disequilibrium. When infection was the issue, nurses focused on taking actions to support the body defense mechanisms. When major organs, including the airway, bowel, and urinary tract systems were obstructed, nurses identified strategies that removed the obstructive substances and minimized organ damage.

There were three dimensions specified in the fieldwork that were also identified in the literature describing how nurses in nursing homes manage residents' condition changes.

1) Regarding prevention of organ damage as the most important action to save the lives of the residents

Nurses regarded stroke as the most problematic neurologic events, and they described strategies to prevent possible re-attack and more serious damage to the central nervous systems. Nurses also considered frail blood vessels, which are prone to blockage and bursting, as areas of concern and monitored residents closely for subtle changes. To preserve physical abilities and prevent further physical deterioration, nurses assessed residents' adaptation in daily life. Moreover, nurses facilitated fast transfer to the ER when necessary. One nurse with six years and ten months of experience stated, "Whenever I notice something strange with my resident, I check vital signs. Then, ask my resident to firmly grasp my hands. I compare the grip of each hand and if there is any difference, I consider immediate transfer to the ER to prevent further deterioration."

2) Striving to recognize and evaluate residents' change in condition expeditiously in emergency situations

Nurses stated that the most crucial parts in decision making involved acknowledging recent responses that indicated deterioration and identifying underlying pathology and co-morbidity.

Nurses participated in strategic thinking and took an action when a condition change occurred because of various heart condi-
ations such as malfunction of heart, overload of the heart due to disrupted kidney function, or a vulnerable heart in a frail body.

When we look into interviews regarding infections, a nurse with three and a half years of experience stated, “Fever is not a typical sign for infection in residents of nursing homes. Therefore, I consider every sign in making decisions on how to manage the resident’s infection. In changing a diaper, if I can detect a very disgusting odor from urine that is different from the odor due to urine concentration, I seriously consider the possibility of urinary tract infection.” A nurse with eight years of experience stated, "In case of pneumonia, I transfer my resident to the ER. To lower fever, I would apply ice massage to prevent febrile convulsion or hydrate to prevent dehydration.”

3) Coordinating actions with a focus on stabilizing the residents’ physical condition when assessing radical condition changes

Nurses stated that they cared for residents based on their knowledge of emergency care while checking residents’ responses from interventions. For instance, when nurses performed emergency care in nursing homes, they reported that they made major decision on what to do base on the comparison of each intervention’s outcomes. Nurses focused on fluid equilibrium between intake and output, so that they could maintain a normal range of blood parameters including glucose and albumin, and could prevent shock. Nurses management of residents’ metabolic imbalances depended on the facilities’ management capacity and the legal boundaries of their nursing actions. In these cases, they paid attention to residents’ vulnerabilities, including disequilibrium of hemodynamic homeostasis, and assessed daily life behaviors to discern abnormalities. The underlying goal was to prevent shock. One nurse with nine years and three months experience stated, "Sometimes, there are residents with unstable blood potassium levels. In such cases, we monitor monthly lab data on blood urea, nitrogen, and creatinine to detect radical condition changes.” During meals, asphyxia was the most common obstruction-related event. Nurses’ major priorities were, in the order of importance, prevention of obstruction, removal of obstructing substances, then transfer to the ER. Concretely, nurses observed each resident with high risk of organ obstruction, recognized warning signs, removed substances which blocked organs by opening channels, and assessed residents, then
transferred to ER when necessary. A nurse with seven years' experience stated, "When a case of asphyxia occurs, all the staffs in the nursing home work together, and try to remove the substances in the resident's larynx or tracheobronchial tree through the Heimlich maneuver. We also check respiration, pulse, and level of consciousness, supply oxygen, and at the same time, call 911."

**Ethical considerations**

The study was approved by the Ethical Review Board of the University (KU-IRB-10-15-P-2). The purpose of the study was explained to the participants. The participants were informed that the participation was voluntary and were assured that the information they provided would remain confidential.

3. Phase 3 (The final analytic phase): Conceptual delineation through integration of the literature data and the fieldwork results

In the final analytic phase, we defined nurses’ management of residents’ condition change in nursing home and investigated its dimensions by collaborating results from the theoretical phase and fieldwork phase comprehensively.

Condition change in nursing homes were disclosed as total of 5 categories and 18 subcategories in both theoretical and fieldwork phase. In the theoretical phase, three dimensions 'Categorizing residents with radical condition change according to the patients’ status to minimize damage in major organs', 'Mode of management: ensuring the safest and the most appropriate course of action in assessing', and 'Managing, and determining whether to transfer to the ER, identifying possible origins of radical condition change taking into account the residents' were derived. And in the fieldwork phase, also three dimensions 'Regarding prevention of organ damage as the most important action to save the lives of the residents', 'Striving to recognize and evaluate residents' change in condition expeditiously in emergency situations', 'Coordinating actions with a focus on stabilizing the residents physical condition when assessing radical condition changes' were identified. In the final analytic phase, each dimension from the theoretical phase and the fieldwork phase were combined to derive final dimensions. Firstly, 'Categorizing residents with radical condition change according to the patients’ status to minimize damage in major organs' dimension from the theoretical phase and 'Regarding prevention of organ damage as the most important action to save the lives of the residents' di-
mension from the fieldwork phase were compiled to ‘Categorizing residents with radical condition change to prevent organ damage’. Secondly, ‘Mode of management: ensuring the safest and the most appropriate course of action in assessing, managing, and determining whether to transfer to the ER’ dimension from the theoretical phase was compiled with ‘Coordinating actions with a focus on stabilizing the residents’ physical condition when assessing radical condition changes’ from the fieldwork phase to ‘Coordinating nursing responses to shock by attempting to initially prevent shock and then to preserve the physical state for energy conservation and organ-function restoration’.

Finally, ‘Identifying possible origins of radical condition change considering the residents’ co-morbidities, frailty, and characteristics of disease’ dimension from the theoretical phase was combined with ‘Striving to recognize and evaluate residents’ change in condition expeditiously in emergency situations’ from the fieldwork phase to ‘Promptly recognizing and evaluating residents’ change in condition’.

Consequently, the structure of nurses’ management of residents’ condition change in nursing home which includes other complex components are as shown in [figure 1] and the results are as follows.

Figure 1: Nurse’ Management of Nursing Home Resident’ Condition change
Nurses’ management of condition changes in nursing home residents was an active process that is time sensitive, which involved assessment of all signs and symptoms, considered residents’ comorbidities, frailty, and one’s past medical history. Identifying possible origins of a radical condition change was a cyclical process involving assessment of residents’ physical signs that denoted condition change. There was active comparison with residents’ usual daily patterns and symptoms. Nurses prioritized choice of interventions to minimize the damage to major organs, and accomplished all of the above within a limited time.

Nurses’ management of condition changes in nursing home residents consisted of three dimensions with several attributes. The first dimension involved categorizing residents with radical condition change to prevent organ damage. Nurses compared the resident’s ongoing condition with his or her usual daily condition, and sequentially prioritized actions to prevent further physical deterioration. The second dimension involved promptly recognizing and evaluating residents’ change in condition by perceiving recent resident responses indicating deterioration, and taking into account the resident’s underlying pathology and co-morbidities. The third dimension involved coordinating nursing responses to shock by attempting to initially prevent shock and then to preserve the physical state for energy conservation and organ-function restoration. This dimension required that nurses integrate their choice of a rescue strategy with knowledge of residents’ responses to interventions, the rescue protocols of the nursing home, and a comparison of expected outcomes of each intervention to ensure appropriate nursing actions.

4 DISCUSSION

This study used a qualitative approach and a hybrid method to determine the definitions, dimensions and attributes of condition change in nursing home residents, plus to conceptualize care for effective management practices of nurses.

The research result showed that nursing home residents are categorized into 5 categories of 1) cardiac problems, 2) central nerve system problems, 3) metabolic imbalances, 4) infection problems,
and 5) organ obstruction problems, then into 18 subcategories.

These results are in close agreement with Lim’s (2010) "A study on development of a computer decision making program to support management of the elderly’s condition changes due to radical vital signs change in nursing home". Lim (2010) also defined asphyxia, falls / fracture, hypoglycemia, pneumonia, and change of consciousness as 'condition change due to radical vital sign change' by interviewing six nursing home nurses in South Korea, through Hybrid method. This study expended its scope from the study of condition change due to vital sign change to other situations. By interviewing 34 nurses from 11 different regions, selected group based on the size and the regional characteristics increased its practicality and generalization by reflecting various practice conditions in nursing home in South Korea.

However, Mongomery and Mitty (2008) reported that when change in vital signs, delirium or edema, bleeding, falls, chest pain, medication error, constipation / diarrhea / emesis, pain, dehydration, pressure ulcers / skin rash, depression / suicidal ideation, seizures, visual changes, shortness of breath, including vital sign change as a scope of emergency situation management for nursing home residents which nursing home nurses experience. This distinction is speculated to be due to differences in nursing home systems in Korea and the US, racial differences of the residents, and different approach for emergency or condition changes in Korea and the US.

This study has reflected nursing home practice in Korea through vast data collection and has its significance in that this study is a holistic study which defined nursing home practice and condition change, a prior stage to an emergency situation that commonly occurs to nursing home residents with chronic disease.

The literature on nurses’ management of residents’ condition change has focused primarily on research concerning how nurses identify the available treatment regimen in nursing homes to ensure the safest and most appropriate course of action (Mercer and Robinson, 2008).

This recent data emphasized that nurses should know their patients’ routine behaviors and patterns to develop standards for action, since comparison is an important tool in identifying residents’ current status.
Nursing has always focused on ensuring patient safety as key purpose of nursing intervention and is grounded in the belief that patient safety is a basic human need. In an aging society, it is necessary to attain a clear conceptualization of nurses' management of nursing home residents' condition change in the gerontological nursing context.

The results of this study indicate that many nurses can offer strategies derived from their experience caring for the elderly and be used to develop protocols that impact nurses' management of nursing home residents' condition change. Further research on specific management of each subcategories on condition changes of nursing home residents are necessary, which will help to enhance the quality of emergency care in nursing home.

There are 2 limitations to this study. Although we collected data from 34 nurses from 11 different nursing homes considering the size and the regional characteristics of Korea, we did not take nurses' educational backgrounds, past clinical experiences, or nursing home working experiences into account. Thus, there were differences between individuals on how one copes with condition changes.

Because the scope of condition changes in nursing home is vast, concept analysis was carried by limiting the range of problems based on the preliminary interviews. Hence, other problems such as falls or delirium were not considered.

5 CONCLUSION

This study is a concept analysis for Nurses' management of residents' condition change using Hybrid method. The result showed that nursing home residents are categorized into 5 categories of 1) cardiac problems, 2) central nerve system problems, 3) metabolic imbalances, 4) infection problems, and 5) organ obstruction problems, then into 18 subcategories.

This study will adduce concept definition for Nurses' management of residents' condition change and could be utilized for building protocols for condition change or practice guidelines development.

Moreover, the materials would be a foundation for the development of emergency nursing in nursing homes. Further on, this
would be valuable references for instrument development and program development. Thus, promote enhancement of patients safety and provide holistic care for the residents in nursing homes.

6 ACKNOWLEDGMENT

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References


