

## SELF-CARE ABILITY OF HOSPITALIZED ADULTS AND ELDERLY PEOPLE: IMPACT ON NURSING CARE\*

CAPACIDADE DE AUTOCUIDADO DE ADULTOS E IDOSOS HOSPITALIZADOS:  
IMPLICAÇÕES PARA O CUIDADO DE ENFERMAGEM

CAPACIDAD DE AUTOCUIDADO PARA ADULTOS Y ANCIANOS HOSPITALIZADOS:  
IMPLICACIONES PARA LA ATENCIÓN DE ENFERMERÍA

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### ABSTRACT

This is a descriptive and exploratory study on the self-care ability of adults and elderly people hospitalized for treatment of disease or chronic health problems. The study aimed at classifying and evaluating this group regarding their degree of dependence in relation to self-care, according to Dorothea Orem's theory and using the self-care ability scale adopted by Carpenito-Moyet. The authors studied 193 subjects selected from clinical inpatient units of the University Hospital of the Federal University of Juiz de Fora (MG) in the first quarter of 2011. Data were collected from the patients' medical records and nursing visits. The study revealed that ninety-eight patients were completely independent (50.78%); ninety-five patients presented some level of self-care deficit (49.22%). Among the latter, three patients were classified at dependency level 1 (3.16%) and required adaptive equipment; fifty-seven patients were at dependency level 2 (60%), requiring assistive personnel; nineteen patients were at dependency level 3 (20%), requiring assistive personnel and equipment; sixteen patients were at dependency level 4 (16.84%) and were totally dependent. Giving the increasing number of patients with chronic disorders that involve some level of dependency, the authors suggest the development of systematic nursing actions concerning adults and elderly people with a self-care deficit syndrome and their relatives at all levels of care in the Unified Health System. Such actions are aimed not only at rehabilitation, but at the promotion of good health and the prevention of new health problems.

**Keywords:** Nursing; Nursing Care; Self-care.

### RESUMO

*Trata-se de um estudo descritivo e exploratório sobre a capacidade de autocuidado de adultos e idosos hospitalizados para tratamento clínico de patologia ou agravo crônico. Objetivou-se classificar e avaliar esse grupo quanto ao grau de dependência em relação ao autocuidado, conforme a concepção teórica de Dorothea Orem, utilizando-se a escala de capacidade de autocuidado adotada por Carpenito-Moyet. Foram pesquisados 193 sujeitos, selecionados nas unidades de internação clínica do Hospital Universitário da Universidade Federal de Juiz de Fora-MG, no primeiro trimestre de 2011. Os dados foram coletados nos prontuários dos pacientes internados e complementados pela visita de enfermagem. Dentre os resultados encontrados, 98 pacientes eram independentes (50,78%); 95 apresentavam algum tipo de dependência para o autocuidado (49,22%), sendo que, desses, 3 foram classificados com grau de dependência "1" (3,16%), necessitando de equipamento auxiliar; 57, com grau de dependência "2" (60%) necessitando do auxílio de pessoas; 19, com grau de dependência "3" (20%), necessitando do auxílio de pessoas e equipamentos; e 16, com grau de dependência "4" (16,84%), totalmente dependentes. Assim, com o aumento do número de pacientes com processos crônicos que envolvem graus de dependência, propõe-se o desenvolvimento de ações sistematizadas de enfermagem com adultos e idosos que evidenciam a síndrome do déficit de autocuidado e a seus familiares, em todos os níveis de atenção à saúde no SUS, visando não somente à reabilitação, mas a ações que favoreçam a promoção e a prevenção de novos agravos.*

**Palavras-chave:** Enfermagem; Cuidados de Enfermagem; Autocuidado.

### RESUMEN

*Se trata de un estudio exploratorio descriptivo sobre la capacidad de auto-cuidado de adultos y adultos mayores hospitalizados para tratamiento de enfermedades o problemas crónicos de salud. Su objetivo fue clasificar y evaluar este grupo según su grado de dependencia en auto-cuidado, de acuerdo con la teoría Dorothea Orem, mediante la escala de capacidad de auto-cuidado de Carpenito-Moyet. Los autores entrevistaron a 193 sujetos seleccionados de las*

unidades de clínica médica del Hospital Universitario de la Universidad Federal de Juiz de Fora (MG) durante el primer trimestre de 2011. Los datos fueron recogidos de las historias clínicas de los pacientes ingresados y de las notas de los enfermeros. El estudio reveló que 98 pacientes (50,78) eran independientes y que 95 pacientes (49,22%) tenían algún tipo de dependencia para el auto-cuidado; entre ellos, 3 pacientes (3,16%) fueron clasificados como grado una dependencia, con necesidad de equipos auxiliares; 57 pacientes (60%) grado de dependencia 2, que requiere ayuda de personas; 19 de los pacientes (20%), grado 3 que precisa ayuda de personas y equipos y 16 pacientes (16,84%) con grado de dependencia 4, es decir, totalmente dependientes. Debido al aumento de pacientes con enfermedades crónicas que implican algún grado de dependencia, se propone el desarrollo de acciones de enfermería sistemáticas con adultos y adultos mayores con síndrome de déficit de auto-cuidado y con sus familias en todos los niveles de atención del Sistema Único de Salud. Tales acciones buscan no sólo a la rehabilitación sino también la promoción de la salud y la prevención de nuevos problemas de salud.

**Palabras clave:** Enfermería; Cuidados de Enfermería; Auto-cuidado.

## INTRODUCTION

Chronic conditions increased substantially over the last two decades of the twentieth century when Brazil experienced two processes that produced important changes in the pattern of disease in its population. The first was demographic transition – lower fertility and birth rates – and progressive increase in life expectancy leading to an increase in the proportion of elderly people compared to other age groups. The second was the epidemiological transition, characterized by important changes in morbidity and mortality; there are significant regional discrepancies in the socioeconomic status and access to health services<sup>1-2</sup>.

Epidemiological and demographic transition are related to factors that contribute to the increase in chronic conditions: urbanization, access to health services and diagnostics, recent cultural changes, the adoption of unhealthy lifestyles, sedentary lifestyle, increased stress, the consumption of high-fat foods, carbohydrates and salt and harmful habits such as drinking alcohol and smoking. These make new demands on the health system, which, if not managed, will become the leading cause of disability worldwide by 2020 and the more expensive disease for healthcare systems<sup>2-4</sup>.

At the beginning of the twenty-first century, chronic diseases were already responsible for 60% of the expenditure on the treatment of diseases throughout the world; it can reach 80% in 2020, mainly in developing countries. Moreover, adherence to treatment in chronic diseases is only about 20%; it means a high financial burden to family, government and society, as well as a negative health statistic<sup>3</sup>. In Brazil during 2011, chronic diseases (NCD) – particularly, cardiovascular disease (30%) and cancer (15.6%) – were already responsible for 70% of deaths. Low income population with a low education level and vulnerable groups, such as the elderly, are the most affected<sup>4</sup>.

Most chronic conditions and many of their complications are preventable. Health professionals should interact with the patient and his/her family and, through education and communication skills, guide them as to the adoption of preventive measures<sup>3</sup>. Nursing is a vital participant in the prevention of injuries and the promotion and protection of health; the nurse should

give support, individually and collectively, to the prevention of disability, preservation of functionality and the improvement of the quality of life, particularly among the elderly population<sup>5-6</sup>.

Educational practice is an integral part of nursing care. Such practice, according to Acioli<sup>7</sup>, should be an exchange of experiences and knowledge; the nurse observes the context and identifies needs in order to, systematically, evaluate and redirect the development of an action plan.

At the macro level, occasional policies and efforts have also been made by the World Health Organization (WHO) and the Unified Health System (SUS) in Brazil, for the prevention and/or the control of these conditions. The WHO proposes a model of innovative care for chronic conditions based on a triad formed by patient/families, community partners and health care team. Nurses are a part of the health care team that are able to suggest different ways of coping with chronic conditions. The WHO model emphasizes self-management as an important strategy for coping with chronic conditions because it enables people to take care of themselves with the support of information and educational materials carefully prepared, that includes assistance through online services or digital television<sup>3,5-4</sup>.

As a field of study and practice – based on Dorothea Orem's theory-, nursing conceives self-care, as "the performance or practice of activities that individuals execute on their own behalf to maintain life, health and well-being<sup>8,84</sup>." According to Orem, when a person does not have sufficient skills to meet self-care demands, it becomes necessary for another person to exercise such care, in this case, the nurse<sup>9</sup>. Carpenito-Moyet<sup>10</sup>, like Dorothea Orem, conceives self-care as the ability of a person to provide their own care in all areas in an independent manner.

In 1985, Dorothea Orem developed her general theory of self-care deficit that consists of three interrelated theories: the theory of self-care; the theory of self-care deficit; the theory of nursing systems. The latter is based on the patients' self-care needs and their ability to perform them. The theory identifies three classification of nursing systems: wholly compensatory system (the patient is unable to develop self-care actions and requires total nursing care), partly compensatory system (both the patient and the nurse develop self-care actions); support-

ive/educative system (the patient is able to develop his/her own care, but needs the nurses' guidance on how to perform it)<sup>8</sup>.

Dependent adults and elderly people with some kind of injury or chronic condition normally show deficits in activities of daily living (ADLs) and/or instrumental activities of daily living (IADLs). The ADLs refer to physical and physiological activities, such as eating, bathing, using the toilet, dressing and walking; the IADLs are cognitive and intellectual activities that help to meet the demands of everyday life, such as washing, ironing, cooking, shopping and paying bills.<sup>11-12</sup>

Self-care ability is the object of this study and its evaluation is fundamental contribution to the nurse that is committed to the development of educational/research/care actions for that specific group. Carpenito-Moyet scale – used to measure the self-care ability of hospitalized people when applying Gordon's functional health patterns<sup>13</sup> – has been deemed efficient to assess the patterns of activity and exercise. It evaluates an individual's ability to perform the ADLs (eating, bathing, dressing, getting dressed and using the toilet, mobility, transfers, ambulation and stair climbing) and the IADLs (shopping, cooking and cleaning). According to Carpenito-Moyet<sup>10</sup>, referring to the Classification of Nursing Diagnoses NANDA®, the person presents a self-care deficit syndrome when he/she is completely unable to perform both ADLs and IADLs self-care activities.

This article presents a study on the self-care ability of adults and elderly people, according to sex, during hospitalization for treatment of chronic degenerative disease and identifies the patients' dependency level. It is the result of the first stage of the research "Self-care of family caregivers of elderly people or dependent adults after hospital discharge" developed for post-graduation degree *Stricto Sensu* at the Nursing School of the Federal University of Juiz de Fora.

This stage happened after systematic observation, during nursing care practice, of the large number of adults and elderly people hospitalized for treatment of chronic diseases that presented some level of dependency to perform self-care. An early home discharge has become as well increasingly common.

The authors assume that this situation is consequence of the policy of de-hospitalizations in which home discharge is encouraged to reduce financial costs, bed occupancy rates and the risks of a prolonged hospitalization. Consequently, those patients return to community and family as soon as acute problems are solved, but presenting degrees of self-care deficit that often call for high complexity care; the burden is, ultimately, placed on the family<sup>14-16</sup>.

This context emphasized the difficulties of the family and the health system in dealing with chronic conditions and the need for diagnoses that support nursing care, either during hospitalization, by providing guidance to home discharge, either after hospital discharge or home visits by the Family Health Strategy.<sup>17</sup>

The overall goal was to assess adults and elderly people hospitalized for treatment of chronic disease, for their self-care ability. It aimed at classifying the study group according to dependency level, identifying differences between male and female patients, and highlighting the group with a dependency level that requires the caregiver's supervision, support or action to perform self-care after hospital discharge.

## METHODOLOGY

To achieve the objectives listed above an exploratory research was carried out. This type of research was chosen because it enables to identify the study variable and its meaning as it happens in that specific context. Its purpose was to obtain information about the inpatients universe at a given time, in order to truly reflect the context's characteristics regarding self-care ability. The starting point was the theory that the lower a person's self-care ability, the greater the dependency levels of nursing care and/or caregiver after hospital discharge. Quantitative research resources were used; systematic data collection relied on a structured instrument (evaluation scale) and the compilation and analysis, interpretation and mathematical calculations were based on descriptive analysis of quantitative data. Significant data to the analysis were presented in tables and graphics; discussion was based on the theoretical and thematic methods adopted in this study<sup>18</sup>.

The research scenario was the University Hospital of the Federal University of Juiz de Fora (in Portuguese, HU/UFJF-MG), an educational and research institution with an infrastructure compatible with the development of the study. The hospital was founded in 1967; it is a referral centre for medium and high complexity cases in thirty specialties – clinical, surgical, diagnostic and therapeutic. It is a reference hospital in immune-mediated neurological diseases, liver diseases, leprosy rehabilitation, bone marrow transplantation and the treatment of cystic fibrosis. It provides training on ten among the fourteen health professions. The hospital serves the south-eastern of Minas Gerais – ninety-five municipalities -, and other regions of the state as well as the south-central region of the State of Rio de Janeiro<sup>19</sup>.

Data collection was carried out in the first quarter of 2011 (from 1<sup>st</sup> of January to 31<sup>st</sup> of March) in the male and female health care unit of the HU/UFJF called Women's Health Unit and Men's Health Unit located at the second and third floor, respectively. Each has eight wards, being six with three beds and two with four beds, making up a total of twenty-six beds in each unit. The criteria for inclusion in the study were patients over 18 years old, resident in Juiz de Fora, conscious at the time of evaluation or accompanied by responsible caregiver.

The research was based in the evaluation of self-care ability using, as data collection tools, active research on the medical records and nursing visits. The universe of 311 patients was

registered considering the above criteria; subsequently, 193 patients were included in the research, 119 women and 74 men. It is worth mentioning that, in the first quarter, the number of admissions was restricted if compared to other periods of the year because of academic holidays and the residents' admission in the programs offered by the institution.

To collect data related to the hospital admission the authors developed a data collection form requesting identification, sex, age, bed number, admission data, cause of admission, marital status, colour of skin, profession, address, telephone number, self-care dependency level, family caregiver and data of hospital discharge. Through this form a database was created for each participant in the research and subsequent classification of the dependency level and analysis was carried out.

The scale for the assessment of self-care ability was adopted<sup>10</sup> to classify the dependency level (Picture 1).

Picture 1 - Assessment of self-care ability scale

Requirements	Dependency Degree				
	0	1	2	3	4
Eating/Drinking					
Bathing					
Getting dressed					
Using toilet					
Mobility in bed					
Transfers					
Ambulation					
Climbing stairs					
Buying					
Preparing food					
Home maintenance					

Legend: 0 = Independent; 1 = Need of adaptive equipment; 2 = Need the help of others; 3 = Need help of other people and equipment; 4 = Dependent/Unable.  
Source: Carpenito-Moyet.<sup>10,50</sup>

In her data collecting model, Carpenito-Moyet<sup>10</sup> adopts the systematic nursing process according to Gordon's<sup>10</sup> functional health patterns and suggests this scale for the assessment of a person's functional pattern of activity/exercise according to his/her self-care ability. That scale allows nurses to classify the dependency level – ranging from independent to dependent/unable – according to a group of self-care requirements that includes basic and instrumental activities of daily living. Therefore, the dependency level increases as the numbering scale progresses in each requirement. The dependency referred to might be on equipment such as a bed railing, a wheelchair, a crutch, or a walker, on probes or insulin pumps, on a person to help, or on both person and equipment. It includes also the completely dependent condition in which the patients are unable to manage self-care activities on

their own. According to this scale, starting from level 2 the patient becomes dependent on the help of others to perform self-care<sup>10</sup>.

Approval to undertake this exploratory research was granted by the Ethics Committee of the HU/UFJF<sup>20</sup> under Protocol No 103-420 – 2010.

## RESULTS AND DISCUSSION

Clinical units were selected based on unsystematic observation of the profile of patients routinely admitted. These patients presented a higher self-care dependency level – according to the dependency level scale adopted – in relation to surgery sectors, for instance. The duration of hospital stay in clinical sectors was higher; the profile was adults and elderly people with chronic diseases and with a high dependency level.

During the period considered, 311 admissions were identified – 175 in the Women's Health Unit and 136 in the Men's Health Unit. Among the 175 female patients, fifty-five resided in other municipalities of the southeast of Minas Gerais and one was under 18: these were, therefore, excluded from the study. The remaining 119 patients were over 18 years of age and residents in Juiz de Fora and were, therefore, included in the research. Of the 119 patients selected: five were transferred to the surgical clinic, four were transferred to another hospital, two were admitted to the hospital's ICU, one went to the another hospital's ICU, one was discharged after escaping from hospital, one was discharged on request, eight passed away, eight-six were discharged after condition "improved"; eleven female patients remained in hospital after the conclusion of data collection.

It was observed that out of the 119 at the Women's Health Unit: 53% presented dependency level 0 (self-care independent); 28.50% were at a dependency level 2 (needed the help of others); 8.40% were classified as levels 3 and 4 (totally dependent on other people and equipment); 1.70% were classified at dependency level 1 and required ancillary equipment such as a crutch to perform self-care (Table 1).

Table 1 - Distribution of patients at the female units according to self-care dependency levels – University Hospital of the Federal University of Juiz de Fora, 1st quarter, 2011

Self-care degree of dependency	Jan.	Feb.	Mar.	Total	Percentage (%)
Total of classified patients at the female wards	42	44	33	119	100,00
Grade 0	26	24	13	63	53,0
Grade 1	1	0	1	2	1,70
Grade 2	8	16	10	34	28,50
Grade 3	2	4	4	10	8,40
Grade 4	5	0	5	10	8,40

Source: Prepared by the authors according to survey data.

Among the 136 patients admitted to the Men's Health Unit, sixty-two resided in other municipalities in the south-eastern region of Minas Gerais, and were, therefore, excluded from the study. The remaining seventy-four patients were over 18 years old and lived in Juiz de Fora and were selected to participate in the research. Among the seventy-four patients selected: two were transferred to the surgical clinic, three to the hospital's ICU, one to another ICU; one was discharged on request; two were transferred to another hospital and one passed away; fifty-three patients were discharged after their condition "improved" and eleven patients remained in hospital after the conclusion of data collection.

Of the total of patients evaluated: 47.30% presented dependency level 0 and were considered independent; 31.08% presented dependency level 2 (needed the help of other people); 12.17% fell into dependency level 3 (needed help of other people and equipment); 8.10% were at dependency level 4 (totally dependent); 1.35% had a dependency level 1 (need of ancillary equipment such as wheelchair to perform self-care) (Table 2).

Table 2 - Distribution of patients in the male units according to self-care dependency grade – University Hospital of the Federal University of Juiz de Fora, 1st quarter, 2011

Self-care dependency grade	Jan.	Feb.	Mar.	Total	Percentage (%)
Total of classified patients at the male wards	29	21	24	74	100,00
Grade 0	16	11	8	35	47,30
Grade 1	0	0	1	1	1,35
Grade 2	11	4	8	23	31,08
Grade 3	1	5	3	9	12,17
Grade 4	1	1	4	6	8,10

Source: Prepared by the authors according to survey data.

Apart from a higher number of female admissions there were no significant differences with regard to gender and considering the self-care dependency level of the patients in the period studied.

The study revealed that the number of hospitalization days in both units – sectors that receive larger number of patients with NCDs – varied, in the first quarter of 2011, between two and forty-eight days. The study demonstrated that patients with lower levels of dependency (0 and 1) were related to diagnostic investigation of acute cases and constituted a short-term stay in hospital; patients with higher levels of dependency (levels 2, 3 and 4) stayed longer in hospital.

The diseases that led to the hospitalizations in both units in the period surveyed, according to ICD-10<sup>21</sup>, can be consulted in Table 3:

Table 3 - Distribution of patients in the female and male units according to the ICD-10 more common pathologies and injuries – University Hospital of the Federal University of Juiz de Fora, 1st quarter 2011

Pathologies	Women Health Unit	Men's Health Unit
Total	119	74
Lung diseases	20	16
Diseases of the digestive system	18	14
Chronic kidney diseases	14	6
Heart diseases	15	5
Neurological diseases	15	6
Staphylococcus infections	3	7
HIV-related diseases	14	3
Ischemic stroke	6	6
Hematologic disorders	6	5
Cancer	2	3
Metabolic disorders	2	2
Vascular diseases	2	1
Rheumatic Diseases	2	0

Source: Prepared by the authors according to survey data.

It is worth mentioning that, in that quarter, a higher number of female patients were hospitalized. According to the ICD-10, the diagnoses were as follows: lung, gastrointestinal disorders, heart disease and neurological diseases, followed by hospitalization for kidney diseases treatment and HIV related-diseases. Male patients, according to the same criteria, were admitted with: lung, gastrointestinal disorders, infections, kidney and neurological diseases. There were no records of admissions for rheumatic diseases.

The main cause of hospitalization among male and female patients was NCDs and the higher morbidity was detected among female patients. Analysing the profile of hospitalization in the clinical units in the context of the public health system, it should be mentioned that the Brazilian Department of Health action plan on NCDs revealed that there are significant regional differences in the distribution of these diseases. Such differences are related to gender, ethnic and racial groups, life cycle and social and economic strata as well as the access to disease prevention and control. Those conditions highlight health inequalities that should be reduced<sup>4</sup>.

Another factor to consider is that the patients were admitted to a federal teaching and research hospital that is a macro regional referral centre: the public system tends to refer to that hospital patients requiring more diagnostic and therapeutic resources. Finally, it should be recognised the de-hospitalization policy that restricts hospital admission to more serious cases whose treatment would be impracticable elsewhere.

The self-care ability related to age constituted an important research variable and the difference between the genders can be observed in the Women's Health Unit and the Men's Health Unit.

Of the 119 women selected, sixty-three patients (53%) were classified with dependency level 0 (self-care independent). However, fifty-six patients (47%) presented some level of dependency. Among these, thirty-four patients (60.7%) were a dependency level 2 (dependent on the help of others). In levels of dependency 3 and 4 (ranging from the use of equipment and other aid to total dependence) ten patients (17.85%) were included. Only two patients (3.6%) presented dependency level 1 (dependent on some kind of auxiliary equipment) (Table 4).

Table 4 - Relationship between the age group and self-care dependency level at the Women's Health Unit – University Hospital of the Federal University of Juiz de Fora, 1st quarter 2011

Self-care dependency level	Age Group (in years) n = 119			Total
	18 to 29	30 to 59	≥ 60	
Total	8	68	43	119
Grade 0	4	48	11	63
Grade 1	1	1	0	2
Grade 2	3	11	20	34
Grade 3	0	5	5	10
Grade 4	0	3	7	10

Source: Prepared by the authors according to survey data.

In relation to the male patients, most of them presented some self-care dependency level. Of the seventy-four patients evaluated, thirty-five (47.3%) presented self-care capacity intact; thirty-nine patients (52.7%) presented some dependency level. Among those, one (2.6%) presented dependency level 1 (dependent on ancillary equipment); twenty-two (56.4%) presented dependency level 2; ten patients (25.6%) presented dependency level 3 (dependent on the help of other people and equipment); six patients (15.4%) – those with some kind of dependency – were classified as totally dependent (Table 5).

It can be observed that the largest number of hospitalized women and men, classified as self-care independent (level 0), were on the age group between 30 and 59 years of age. Patients with higher dependency levels (levels 2 to 4) were in their thirties. The highest number of levels 2 and 4 fell into the group above 60 years, demonstrating that an increase in age influences the dependency level.

Regardless of gender or age, coordinated interventions to reduce morbidity related to the NCDs are developed. Such interventions consisted in the articulation of the actions of epidemiology, health care and health promotion in order to pre-

vent fragmentation of actions; they are aimed also at reducing inequalities in relation to access to environments, practices and opportunities for healthy living, as well as promoting the autonomy of individuals and communities to achieve the right to health and quality of life<sup>1</sup>.

Table 5 - Relationship between age group and self-care dependency level in the Men's Health Unit – University Hospital of the Federal University of Juiz de Fora, 1st quarter 2011

Self-care dependency level	Age Group (in years) n = 74			Total
	18 to 29	30 to 59	≥ 60	
Total	10	32	32	74
Grade 0	5	25	5	35
Grade 1	0	1	0	1
Grade 2	2	5	15	22
Grade 3	2	1	7	10
Grade 4	1	0	5	6

Source: Prepared by the authors according to survey data.

This study revealed that of the 193 patients classified, ninety-eight were independent (50.78%) and ninety-five presented some type of self-care dependency (49.22%). Of the ninety-five dependent patients, three were classified at dependency level 1 (1.55%), fifty-seven at dependency level 2 (29.53%), nineteen at dependency level 3 (9.84%) and sixteen (8.30%) at dependency level 4.

The percentage difference between the independent and dependent patients can be considered negligible, if one considers the complexity that a progressive increase in dependency levels entails to self-care and the overload it brings to the nursing staff. According to this assessment scale, patients at dependency level 2 demand the help of others, gradually, and it is the nurse's responsibility to care for this patient during hospitalization.

At hospital discharge, the demands on the health system include – in addition to equipment, medication, tests and controls in other units – home care. The latter is almost always assumed by the family caregiver who is to take responsibility for the home care, especially when the family does not have economic conditions to hire professional help<sup>15</sup>.

The study findings emphasize that the nursing care system can compensate for the self-care through supervision and support/education actions throughout hospitalization. The percentage of patients classified as independent reinforces the importance of health education and self-care guidance that should happen throughout the period of hospitalization and not only at discharge. Health education actions should continue after hospital discharge and should strengthen the patient's relationship with primary care health team.

Considering the high percentage of dependent patients among the study subjects (49.22%), the authors demonstrated the need to warn nurses to, within their working process, dimension the care that compensate for the patient's self-care deficits, partially or totally. It is necessary to consider that, aside from meeting the care needs of patients, the nurses will need to identify the caregiver in the family, and to plan with him/her health education through practices for continuity of care after discharge, particularly if the nursing visits at home are not systematic.

## FINAL CONSIDERATIONS

This study aimed at classifying and evaluating hospitalized adult and elderly people according to their self-care ability. The patients were admitted to hospital for the treatment of clinical disorders or chronic diseases. The study identified the difference between the genders and highlighted the group with degree of dependency that requires the presence of a family caregiver. Taking into consideration the nursing systems proposed by Dorothea Orem, the adult and the elderly patients as well as the family caregivers should be instructed by the nurse – supportive/educative nursing system – so they can continue the self-care program after hospital discharge.

Changes in the demographic and epidemiological profile of the population require changes in the way health education is conducted; it should be considered as a dimension of nursing care, especially by the direct interaction with the population, in hospitals and in the community and it should include guidance on risk behaviours in order to promote health and prevent chronic diseases.

Once the NCDs are installed, the nurse should instruct patients and family caregivers on the suitable care, in order to minimize the degree of dependence that tends to increase the population morbidity and mortality. Considering the context of the public health system, those are the actions in which the health care professional should act beyond the limits of the institution.

Therefore, hospital discharge planning, considered as a health education strategy, should be encouraged for they contribute to a comprehensive care; the dependent person receives a humanized and solution-focused treatment that reduces the probability of rehospitalisation.

It should be emphasized also that health education through educational practices need to be developed in all areas of health care in a coordinated manner; in tertiary care (planning the patient and family to discharge home process); in secondary care (at outpatient units) in which health professionals – nurses in particular -, should instruct and answer questions during consultations and in primary care during home visits, using the Family Health Strategy to monitor the care provided.

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