

## RESEARCH PAPER

# People dependent in self-care: implications for Nursing

A pessoa dependente no autocuidado: implicações para a Enfermagem  
La persona dependiente en el autocuidado: implicaciones para la Enfermería

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## Abstract

**Theoretical framework:** As a result of the growing ageing of the population and the subsequent increase in chronic diseases, we are faced with a significant number of people dependent in self-care. Therefore, to identify these populations and to create solutions adjusted to their specific circumstances and needs has become a major concern.

**Aim:** This study aims to describe the dependence in self-care of dependent people within a family context and identify nursing intervention areas to support people dependent in self-care and their families.

**Methodology:** In a quantitative, exploratory and descriptive study using a random, stratified and proportional sampling technique carried out in a specific region in northern Portugal, 241 families with dependent members were identified.

**Results:** The dependent people were mainly female and of an older age group, predominantly pensioners/retirees. Data concerning the different levels of dependence in self-care showed that a significant percentage of dependent people needed assistance at least to carry out their self-care activities.

**Conclusion:** The results obtained confirm a significant and rather worrying dependence. Dependent people who require health care are in particular need of professional nursing.

**Keywords:** dependence; self-care; family; nursing.

## Resumo

**Enquadramento:** com o crescente envelhecimento da população e o consequente aumento de doenças crónicas, deparamo-nos com um número significativo de pessoas dependentes no autocuidado, sendo hoje uma enorme preocupação a sua identificação e a criação de respostas ajustadas às suas necessidades.

**Objetivo:** com o presente estudo, definem-se como objetivos: descrever a dependência no autocuidado das pessoas dependentes em contexto familiar e identificar áreas de intervenção de enfermagem no apoio às pessoas dependentes e às famílias que as integram.

**Metodologia:** num estudo quantitativo, exploratório e descritivo, recorrendo a uma técnica de amostragem probabilística, aleatória, estratificada e proporcional, foram identificadas, num concelho do norte do país, 241 famílias que integravam pessoas dependentes.

**Resultados:** os dependentes eram, maioritariamente, do sexo feminino, com um nível etário elevado e, predominantemente, pensionistas/reformados. Os dados, relativamente aos diferentes domínios de autocuidado, evidenciaram que uma parte substantiva dos dependentes precisava, no mínimo, de ajuda de pessoa para a concretização das atividades de autocuidado.

**Conclusão:** os resultados obtidos confirmam uma dependência significativa e preocupante. As pessoas dependentes evidenciam a necessidade de cuidados de saúde. Carecem, particularmente, do apoio dos profissionais de enfermagem.

**Palavras-chave:** dependência; autocuidado; família; enfermagem.

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## Resumen

**Marco contextual:** con el creciente envejecimiento de la población y el consecuente aumento de las enfermedades crónicas, nos encontramos con un número significativo de personas dependientes en el autocuidado. A este respecto, la identificación de estas personas y la creación de respuestas ajustadas a sus necesidades suponen, hoy en día, una enorme preocupación.

**Objetivo:** este estudio define como objetivos, describir la dependencia en el autocuidado de las personas dependientes en el ámbito familiar e identificar las áreas de intervención de la enfermería relacionadas con el apoyo a estas personas y a sus familias.

**Metodología:** a través de un estudio cuantitativo, exploratorio y descriptivo, mediante una técnica de muestreo probabilística, aleatoria, estratificada y proporcional, se identificaron, en un municipio del norte del país, 241 familias que tenían personas dependientes.

**Resultados:** las personas dependientes eran, mayoritariamente, del sexo femenino, de edad avanzada y, predominantemente, pensionistas/jubilados. Los datos relativos a los diferentes dominios del autocuidado mostraron que una parte sustantiva de las personas dependientes necesitaba, como mínimo, ayuda de otra persona para concretar las actividades relacionadas con el autocuidado.

**Conclusión:** los resultados obtenidos confirman una dependencia significativa y preocupante. Las personas dependientes muestran que necesitan asistencia sanitaria y, en concreto, carecen del apoyo de los profesionales de enfermería.

**Palabras clave:** dependencia; autocuidado; familia; enfermería.

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## Introduction

The scientific development and the social-political transformations which have occurred over the last decades brought about significant changes to the private and public life of populations. In fact, the increase in the average life expectancy and the higher prevalence of chronic diseases have led to an exponential rise in the number of people with physical, emotional and cognitive limitations, which inevitably lead to dependence (Petronilho, 2007). This is a reality in Portugal, as well as in other so-called developed countries, where health policies, based on economic but also humanistic principles, point to the integration of dependent persons within the family context. An example of this is the current effort to develop and expand long-term care, which are mainly directed to the maintenance of dependent people at home, whenever the necessary therapeutic care and social support can be provided, thus increasing the responsibility of both the family and the community in caring for dependent persons.

In Portugal, studies assessing the level of dependence in self-care are carried out within research processes. However, in most of these studies, the level of dependence is only used as a variable to characterize participants. Therefore, we believe that Portugal lacks data on the phenomenon of dependence in self-care. The level of dependence is not consistently assessed, nor are all sectors of the population. Also, there is not a differentiation by region. These aspects would be essential to make a diagnosis of the situation, providing evidence for the implementation of concrete interventions, as, according to Caldas (2006), the level of dependence is the major determinant of the type of care which is necessary. Thus, the knowledge of the level of dependence is of particular relevance for nurses, since the need for health care is not related to the already known diagnosis of the disease or the prescribed therapy, but rather to the transition processes experienced by individuals (Silva, 2007). The need for nursing care is not restricted to the dependent person, but extends to the family. In fact, in addition to the health/illness transition process of the individual, who moves from a state of health to a state of disease, from independence to dependence of people or devices, the transition of family members to the role of caregivers in a home setting and the importance of training them to take

on that role must also be considered. Hence, this study aims to describe the level of dependence of dependent people in a family context, particularly in activities related to the different domains of self-care, as well as to identify areas of nursing intervention to support people dependent in self-care and their families. It should be noted that this study is part of a wider research project - on "Traditional families with people dependent in self-care" within the scope of the Master's Degree in Nursing Science.

## Theoretical Framework

When analysing the current context, we observed that the Portuguese society, with its increase in the average life expectancy and decline in the birth rate, is heading towards the gradual ageing of the population. Together with these demographic changes, the therapeutic progress and the improvement of socio-economic conditions have led to the onset of chronic diseases and, consequently, to an increase in the number of people with self-care deficits (Petronilho, 2007; Araújo, 2010). In addition to ageing and chronic diseases, a significant number of road traffic and work-related accidents has also contributed to an increase in the number of people with disabling sequelae which hinder self-care agency (Ribeiro, 2011). In this sense, a dependent person is someone who, for some length of time, requires assistance from another person or device to perform some self-care activities (Araújo, 2010). On the assumption that self-care is essential, and that transitions are closely related to changes in self-care agency generated by development processes or significant life events which require adaptation, dependence in self-care, whether gradual or sudden, deserves a special attention from nurses. Even though it now has different features, dependence in self-care has long been a major concern. One of the key issues is to understand how a person is identified as dependent and his/her degree of dependence. In their Model of Nursing, Roper, Logan, and Tierney (2001) considered that to assess a person's level of dependence in each activity is an important competence of Nursing professionals, for it will enable them to identify the type of care necessary and the most adequate interventions to achieve viable goals in each situation. In addition to developing professional judgment regarding people's skills, an

important intervention of Nursing is to endeavour that, regardless of their age, people do not lose their independence in daily living activities, helping them to become independent and, when necessary, to accept their dependence. More recently, the gradual evolution of professional nursing practice from an essentially executive dynamics to a more conceptual dynamics “with an emphasis on the human responses involved in transitions” (Silva, 2007, p. 14) evokes the need for nursing practices to be based on clients’ effective needs. In the specific case of self-care needs, current demands determine that dependence should be assessed based on self-care activities. According to Duque (2009), the identification of people’s level of dependence in each area of self-care, particularly in the activities related to each domain of self-care, not only allows planning individualized care, but also defining and implementing realistic and appropriate interventions for meeting identified needs.

## Research Questions

Considering the objectives defined, we have outlined the following research questions: How dependent are dependent people in activities related to the different domains of self-care? What areas of nursing intervention provide support to dependent people in self-care and their families?

## Methodology

An exploratory, descriptive, quantitative, cross-sectional study was developed to answer the research questions. The study was carried out in the municipality of Paços de Ferreira, which is divided into 16 parishes, and the target population was composed of traditional families with dependent people. Given the impossibility of studying the whole population, a representative sample was selected. Sample size was calculated using the Lwanga and Lemeshow’s formula (1991) published by the World Health Organization where  $n = Z^2 p (1-p)/d$ . A probability, proportional, stratified, random sampling technique was used. As the aim was to study a large population – traditional families residing in the municipality of Paços de Ferreira, which were divided into groups according to a specific characteristic, i.e. the place of residence

- the strata corresponded to the parishes of the municipality. Proportionality was determined based on the representation of families from each parish in relation to the value of the total population of the municipality of Paços de Ferreira, i.e. the number of families selected in each parish was proportional to the weight that the number of families residing in the parish had in the total number of families of the municipality. To identify the geographical distribution of the families in each parish, the Information Reference Geographical Database was used. *Quantum GIS*, a Geographical Information System, was used for the geographical stratified random selection of territorial subsections where the traditional families were to be found, according to the dimension required for each parish. The outputs regarding the geographical subsections and the number of traditional families of the sample, once imported to *Bing Maps*, facilitated data collection in the field. Data were collected through a door-to-door interview until the number of families for a representative and proportional sample was achieved. The “Families with self-care dependent people” forms (*Formulários “Famílias que Integram Dependentes no Auto-Cuidado”*) (Duque, 2009), consisting of two parts: part I - Preliminary Survey - and part II – the Dependent Care Provider Form, were used as data collection tools. The construct validity of this form is based on the concepts of the Nursing Outcome Classification (recognized by the American Nursing Association), as well as on the concepts of the International Classification for Nursing Practice (developed by the International Council of Nurses). Data were collected at the families’ home, between October and December 2010, according to the following procedure: completion of a preliminary survey, request for voluntary collaboration in the study, information on the research objectives and confidentiality, and, finally, the application of the instruments. With this in mind, all ethical and legal principles were fulfilled, such as the notification to the national data protection authority. Data were analysed using the Statistical Package for the Social Sciences (SPSS) software, version 19.0.

## Results

Of the 2115 traditional families who accepted to answer the preliminary survey, 248 lived with dependent

people. Of these 248 families, 7 refused to participate in the study. Therefore, the final sample was composed of 241 families with self-care-dependent people. Most self-care-dependent people were female (53.1%) with a mean age of 67.57 years. With respect to age, most dependent people were  $\geq 80$  years (39.8%), which supports the association between ageing and the increase of dependence. However, it should be noted that 6.2% of dependent people were under the age of 18, thus corroborating the notion that dependence can exist in any age group. Most dependent people were married/cohabiting (41.7%) or widowed (37.1%) and 81.5% were pensioners or retired. Concerning education, a significant level of illiteracy was observed: 44.6% of the dependent people had no formal education and 41.3% had the 1<sup>st</sup> cycle of basic education. When analysing the situation which led to dependence, we highlight chronic disease (63.6%) and ageing (31.5%) as the main causes for dependence. This fact explains why dependence settled in gradually in most cases (66.5%).

In order to understand the type and level of dependence, each self-care function (bathing, dressing, personal hygiene and grooming, feeding, toileting, rising, turning, transferring, using a wheelchair, walking and taking medication) was assessed using the following scale: dependent, does not participate – completely dependent person, not able to perform the activity; requires assistive person – person who performs (starts and/or completes) the activity, requires someone's assistance; Requires assistive device – person who is independent with assistive device; completely independent – person without any type of dependence to perform the activity.

Therefore, we infer that, during the performance of self-care activities, the person may need someone's

assistance, an assistive device or, in more extreme cases, require replacement. In situations in which the dependent person does not take part in self-care activities, or when someone's assistance is required to perform the activities, the need for care to be provided by another person is considered essential. In the first situation, care means a total replacement "doing for", i.e. a wholly compensatory care, while the latter is a collaborative work, "doing with", a partially compensatory care (Orem, 2001).

While studying the situation of dependence in each self-care domain, a joint analysis of "dependent, non-participant [people]" and people who "need assistive person" was carried out, as the need for someone's assistance in carrying out self-care activities is inherent to these situations.

It should be noted that, in the different self-care domains, caregivers, believing that their relatives could/should not perform self-care activities, ended up replacing them. Hence, the assessment of the family member's level of dependence was not as accurate as intended due to the role played on a daily basis by the caregiver in self-care activities. For this reason, the scores regarding each activity in the different self-care domains refer to the number of people whose dependence level was carefully confirmed, and not to the total number of dependent people (N=241). Moreover, not all activities applied to all dependent people.

Regarding bathing (Table 1), drying the body (81.1%) and washing the body (77.4%) were the activities where more people were dependent, requiring at least assistive person. The activity for which most people only required a device (3.8%) was getting bath supplies. Turning on water was the activity in which more people were independent (44.7%).

TABLE 1 – Distribution of the dependence level by activity in the self-care function "Bathing"

	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
SELF-CARE: Bathing	n (%)	n (%)	n (%)	n (%)
Gets bath supplies	62 (25.9)	99 (41.4)	9 (3.8)	69 (28.9)
Obtains water	57 (23.8)	76 (31.8)	2 (0.8)	104 (43.5)
Turns on water	55 (23.2)	73 (30.8)	3 (1.3)	106 (44.7)
Regulates water temperature	56 (23.5)	83 (34.9)	2 (0.8)	97 (40.8)
Regulates water flow	55 (23.2)	82 (34.6)	2 (0.8)	98 (41.4)
Bathes in shower	46 (19.5)	130 (55.1)	5 (2.1)	55 (23.3)
Washes body	45 (18.8)	140 (58.6)	2 (0.8)	52 (21.8)
Dries body	46 (19.2)	148 (61.9)	1 (0.4)	44 (18.4)

Getting dressed (Table 2) showed a higher percentage of dependent people who at least required assistive person to put on socks (77.4%) and shoes (76.6%). The activity for which most people only required a

device (1.7%) was getting clothes from drawers and closet, while picking up clothes was the activity in which more people were independent (59.6%).

TABLE 2 – Distribution of the dependence level by activity in the self-care function “Dressing”

SELF-CARE: Dressing	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely inde- pendent
	1	2	3	4
	n ( %)	n ( %)	n ( %)	n ( %)
Selects clothing	57 (23.8)	85 (35.4)	1 (0.4)	97 (40.4)
Gets clothing from drawer and closet	63 (26.3)	91 (37.9)	4 (1.7)	82 (34.2)
Picks up clothing	43 (17.9)	54 (22.5)	0	143 (59.6)
Puts clothing on upper body	38 (15.8)	97 (40.4)	0	105 (43.8)
Puts clothing on lower body	41 (17.1)	129 (53.8)	1 (0.4)	69 (28.8)
Removes clothes from upper body	38 (15.8)	92 (38.3)	0	110 (45.8)
Removes clothes from upper body	41 (17.1)	123 (51.3)	1 (0.4)	75 (31.3)
Buttons clothing	54 (22.5)	78 (32.5)	1 (0.4)	107 (44.6)
Unbuttons clothing	54 (22.5)	79 (32.9)	0	107 (44.6)
Uses fasteners	60 (27.6)	82 (37.8)	0	75 (34.6)
Uses zippers	57 (23.8)	85 (35.4)	0	98 (40.8)
Puts on socks	50 (20.9)	135 (56.5)	1 (0.4)	53 (22.22)
Takes off socks	50 (20.8)	131 (54.6)	2 (0.8)	57 (23.8)
Puts on shoes	50 (20.8)	134 (55.8)	2 (0.8)	54 (22.5)
Takes off shoes	49 (20.4)	106 (44.2)	3 (1.3)	82 (34.2)

In the self-care function “personal hygiene and grooming” (Table 3), it was observed that nail care (81.7%) and perineal care (66.4%) were the activities in which more people were dependent and where

they at least required assistive person. Using a mirror was the activity for which most people only required a device (3.5%) and where the percentage of independent people was higher (61.1%).

TABLE 3 – Distribution of the dependence level by activity in the self-care function “Personal hygiene and grooming”

SELF-CARE: Personal hygiene and grooming	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely inde- pendent
	1	2	3	4
	n ( %)	n ( %)	n ( %)	n ( %)
Combs or brushes hair	46 (19.2)	92 (38.5)	7 (2.9)	94 (39.3)
Shaves	23 (18.1)	54 (42.5)	7 (5.5)	43 (33.9)
Applies makeup	26 (27.7)	38 (40.4)	0	30 (31.9)
Cares for nails	52 (21.7)	144 (60.0)	2 (0.8)	42 (17.5)
Uses a mirror	38 (16.8)	42 (18.6)	8 (3.5)	138 (61.1)
Applies deodorant	41 (18.6)	90 (40.9)	1 (0.5)	88 (40.0)
Cleans perineal area	44 (18.5)	114 (47.9)	2 (0.8)	78 (32.8)
Cleans ears	49 (20.5)	103 (43.1)	1 (0.4)	86 (36.0)
Keeps nose blown and clean	42 (17.6)	61 (25.5)	3 (1.3)	133 (55.6)
Maintains oral hygiene	44 (18.6)	66 (28.0)	5 (2.1)	121 (51.3)

When analysing the self-care function “Feeding” (Table 4), we verified that the activities preparing food for ingestion (82.6%) and opening containers (63.5%) were the ones where more people were dependent and who at least required assistance. The

activity for which more people only required a device (6.6%) was getting food onto the utensils. Bringing food to mouth using the fingers was the activity in which more people were independent (69.0%).

TABLE 4 – Distribution of the dependence level by activity in the self-care function “Feeding”

SELF-CARE: Feeding	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Prepares food for ingestion	134 (55.6)	65 (27.0)	3 (1.2)	39 (16.2)
Opens containers	62 (25.7)	91 (37.8)	7 (2.9)	981 (33.6)
Uses utensils	42 (17.4)	57 (23.7)	11 (4.6)	131 (54.4)
Gets food onto the utensils	42 (17.4)	46 (19.1)	16 (6.6)	137 (56.8)
Picks up cup or glass	37 (15.4)	40 (16.6)	9 (3.7)	155 (64.3)
Brings food to mouth with fingers	36 (15.1)	33 (13.8)	5 (2.1)	165 (69.0)
Brings food to mouth with container	37 (15.4)	51 (21.2)	8 (3.3)	145 (60.2)
Brings food to mouth with utensils	38 (15.8)	42 (17.4)	10 (4.1)	151 (62.7)
Drinks from a cup or glass	36 (14.9)	40 (16.6)	9 (3.7)	156 (64.7)
Places food in mouth	38 (15.8)	43 (17.8)	6 (2.5)	154 (63.9)
Completes a meal	38 (15.8)	55 (22.8)	5 (2.1)	143 (59.3)

In the self-care function “Toileting” (Table 5), results show that wiping self after urinating and bowel movement (62.1%) and adjusting clothing after toileting (58.6%) were the activities in which there were more dependent people, requiring at least

assistive person. The activity for which more people only required a device was getting up from toilet (17.4%). The activity in which more people were independent (49.8%) was positioning self on toilet or commode.

TABLE 5 – Distribution of the dependence level by activity in the self-care function “Toileting”

SELF-CARE: Toileting	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Gets to and from toilet	42 (17.7)	72 (30.4)	29 (12.2)	94 (39.7)
Removes clothing	41 (17.1)	80 (33.3)	3 (1.3)	116 (48.3)
Positions self on toilet or commode	39 (16.6)	59 (25.1)	20 (8.5)	117 (49.8)
Wipes self after urinating and defecating	44 (18.6)	103 (43.5)	1 (0.4)	89 (37.6)
Gets up from toilet	39 (16.5)	61 (25.8)	41 (17.4)	95 (40.3)
Adjusts clothing after toileting	41 (17.2)	99 (41.4)	1 (0.4)	98 (41.0)

In the only activity inherent to the self-care function “Rising” (Table 6), 37.8% of the dependent people required at least assistive person, 17.0% only needed

an assistive device and 45.2% were independent in lifting part of the body.



TABLE 6 – Distribution of the dependence level by activity in the self-care function “Rising”

SELF-CARE: Rising	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n ( %)	n ( %)	n ( %)	n ( %)
Lifts part of body	34 (14.1)	57 (23.7)	41 (17.0)	109 (45.2)

Regarding the only activity related to the self-care function “Turning” (Table 7), 29.9% of the dependent people required at least assistive person, 5.0%

only required an assistive device and 65.1% were independent in turning the body from one side to the other.

TABLE 7 – Distribution of the dependence level by activity in the self-care function “Turning”

SELF-CARE: Turning	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n ( %)	n ( %)	n ( %)	n ( %)
Turns body from one side to the other	34 (14.1)	38 (15.8)	12 (5.0)	157 (65.1)

In the self-care function “Transferring” (Table 8), the percentage of dependent people requiring at least assistive person was identical for both the activities transferring from chair/armchair to bed (44.0%) and transferring from bed to chair/armchair (42.8%). Regarding the remaining dependence levels, when both activities were compared, percentages were

also uniform. For the activity transferring from chair/armchair to bed, 13.7% of the people only required a device and 42.3% were independent. For the activity transferring from bed to chair/armchair, 12.9% of people only required a device and 44.4% were independent.

TABLE 8 – Distribution of the dependence level by activity in the self-care function “Transferring”

SELF-CARE: Transferring	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n ( %)	n ( %)	n ( %)	n ( %)
Transfers from bed to chair/armchair	38 (15.8)	65 (27.0)	31 (12.9)	107 (44.4)
Transfers from chair/armchair to bed	41 (17.0)	65 (27.0)	33 (13.7)	102 (42.3)

With regard to the self-care function “Using a wheelchair” (Table 9), the activities in which more people were dependent and required at least assistive person were manoeuvring curbs, ramps and other obstacles with slow, moderate or high speed (64.9%) and transferring to and from the wheelchair safely

(62.1%). An equal percentage of dependent people (5.4%) only required a device to move from place to place in a wheelchair and transfer to and from a wheelchair safely. In the activity “moving body from place to place in wheelchair”, 35.1% of the people were independent.

TABLE 9 – Distribution of the dependence level by activity in the self-care function “Using a wheelchair”

SELF-CARE: Using a wheelchair	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Moves body from place to place in wheelchair	27 (36.5)	17 (23.0)	4 (5.4)	26 (35.1)
Transfers to and from wheelchair safely	32 (43.2)	14 (18.9)	4 (5.4)	24 (32.4)
Manoeuvres curbs, ramps and other obstacles with slow, moderate or high speed	37 (50.0)	11 (14.9)	1 (1.4)	25 (33.8)

In the self-care function “Walking” (Table 10), the activities in which more people were dependent and at least required assistive person were walking long (61.3%) and moderate (48.1%) distances. The activity

in which more people only required a device was walking short distances (33.2%). Bearing weight was the activity in which more people were independent (50.9%).

TABLE 10 – Distribution of the dependence level by activity in the self-care function “Walking”

SELF-CARE: Walking	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Bears weight	31 (13.4)	36 (15.5)	47 (20.3)	118 (50.9)
Walks with effective gait at different paces	41 (17.7)	36 (15.5)	74 (31.9)	81 (34.9)
Walks up and down steps	53 (22.9)	56 (24.2)	66 (28.6)	56 (24.2)
Walks up and down inclines	49 (21.1)	56 (24.1)	69 (29.7)	58 (25.0)
Walks short distance (< 100m)	44 (19.0)	35 (15.1)	77 (33.2)	76 (32.8)
Walks moderate distance (> 100m < 500m)	63 (27.8)	46 (20.3)	58 (25.6)	60 (26.4)
Walks long distance (> 500m)	77 (34.2)	61 (27.1)	42 (18.7)	45 (20.0)

In the self-care function “Taking medication” (Table 11), getting the medication (92.1%) and preparing the medication (89.1%) were the activities where people were more dependent and at least required

assistive person. Taking the medication was the only activity in which people required a device (8%). It was also the activity where more people (41.2%) were independent.

TABLE 11 – Distribution of the dependence level by activity in the self-care function “Taking medication”

SELF-CARE: Taking medication	Dependent, does not participate	Requires assistive person	Requires assistive device	Completely independent
	1	2	3	4
	n (%)	n (%)	n (%)	n (%)
Gets medication	142 (59.7)	77 (32.4)	0	19 (8.0)
Prepares medication	124 (52.1)	88 (37.0)	0	26 (10.9)
Takes medication	54 (22.7)	84 (35.3)	2 (0.8)	98 (41.2)

## Discussion

In the present study, the characteristics of the dependent person are corroborated by previous research (Duque, 2009; Petronilho, Machado, Miguel, & Magalhães, 2010; Ramos, 2010), particularly

regarding the predominance of older people and the female gender. In fact, the percentage of dependent people increases in older population groups (Araújo, Paúl, & Martins, 2010), where female life expectancy is higher. However, dependence can exist in any age range: it can be present since birth; it can be triggered



by an acute illness or accident in childhood, youth or adult life; or, more frequently, it can emerge as people grow older (Figueiredo, 2007). This fact was demonstrated in our study, where participants' age ranged between 7 and 97 years old. The level of illiteracy was considered significant, taking into account studies that proved that moderate to severe dependence is more likely to occur in people with low levels of schooling (Torres et al., 2009).

When analysing the situation of dependence and associated factors, we observed that moving from the status of independent to that of dependent was mostly related to concepts of health/disease transition and/or development. It follows that the situation of dependence may have emerged due to the onset of one or several chronic diseases, or it may be a result of the general loss of functions associated with ageing. Figueiredo (2007) pointed out that living longer increases the risk of developing one or more chronic diseases. However, in many cases, it is hard to distinguish whether the observed limitations result from pathological processes or from ageing. It is true that, in both situations, self-care activities will gradually and steadily become more difficult to perform, leading to situations of dependence from other people or devices. The identification of the person's dependence level in each self-care activity allows nurses to determine specific needs and enables a more appropriate planning of care. Two people may actually obtain the same overall dependence score in self-care, but have different needs. Besides, the person may be dependent to perform certain activities and independent in performing others, a fact which occurred in this study. Changes in the person's ability to perform self-care activities may be related to limitations resulting from motor, sensory or cognitive/perceptual impairment, or from the combination of these. In this study, the greatest dependence level was observed in the activities "getting medication" and "preparing medication". As the sample was mainly composed by elderly people with a significant level of illiteracy, cognitive impairment is inherent to these results. In fact, according to Araújo, Paúl, and Martins (2008), older people often suffer from cognitive decline, thus requiring support to take care of themselves. Hence, it is not surprising that the activities with greater dependence level are those requiring greater movement amplitude and coordination and better

fine and gross motor function, as well as higher manual dexterity, muscle strength or body balance. Examples of this type of self-care activities are: feeding, personal hygiene and grooming, bathing, dressing, using a wheelchair, toileting and walking. Therefore, it was observed that more than 50% of dependent people required at least someone's assistance to carry out these activities. According to the dependence level, "non-participating, dependent [people]" had to be replaced by the caregivers in self-care activities; on the other hand, dependent people who "require assistive person" lacked complementary care. According to Orem (2001), when people do not play an active role in self-care and are socially dependent upon others, they need to be replaced in the performance of activities, i.e., they require a wholly compensatory intervention; when people are able to independently perform some activities, they require assistance in the activities which they cannot perform alone, in which situation caregivers carry out a partially compensatory intervention. On this assumption, the need for partially compensatory care was observed to be the most common situation in this research study.

Following the above and based on what was observed during data collection through the participants' experiences and narratives and the results on the dependence in self-care activities, we consider it important to reflect on the need for new interventions which are closer to the population and meet the needs of dependent people, their families and their communities (Araújo, 2010). In fact, assisting dependent people, as well as assisting their families in the process of caring for a dependent person is, certainly, in line with the social mandate of the Nursing profession. Therefore, when dealing with a high dependence in self-care activities, particularly in the case of "non-participating dependent [people]", nursing interventions should be grounded on: the knowledge and training of skills and abilities of the caregiver so as to replace the dependent person in the different activities; information on the prevention of possible complications for the dependent person; and the institutional, professional and material resources available to facilitate the process of caring for dependent people at home. On the other hand, in the case of dependent people who "require assistive person" to perform self-care activities, nursing interventions should be: aimed at developing

the knowledge and skills of the caregiver; oriented towards the performance of self-care activities focused on assisting dependent people according to their needs; as well as based on the knowledge and training of the dependent person's capacity for carrying out self-care activities. An interesting question emerges when it comes to dependent people who only "require assistive device" for carrying out self-care activities: Could the participants be "less dependent" if any type of device were used? We all recognize that, when performing self-care activities, the use of adaptive devices is important. However, the lack of knowledge regarding the different devices or the difficulties in purchasing them can justify its "non-use" and the consequent high dependence on someone's assistance. Hence, the use of assistive devices could reduce the person's dependence level in carrying out self-care activities, thus evolving, for example, to a situation in which the dependent person only requires devices for all or some self-care activities. Therefore, we highlight the need to expand professional nursing help by implementing interventions which use adaptive devices, without overlooking how to access and use these resources. Another aspect which may contribute to the onset and, perhaps, maintenance of dependence (Andrade, 2009) is the physical and social environment surrounding the dependent person. Physically, the environment may impose architectural and ergonomic barriers with a negative impact on the performance of self-care activities. On the other hand, regarding the social environment, several authors have mentioned that the attitudes and behaviours of people closer to the dependent person may contribute to the promotion of independence or, conversely, to increase their dependence. One of the factors identified by Almeida (2009) which contributes to this situation is overprotective relationships. Actually, when caregivers expect their family members not to be able to carry out certain activities, they end up replacing them in what they would be able to do by themselves. Caregivers are thereby depriving the person of practicing activities that he/she would still be able to perform, which may lead to the gradual settlement of dependence (Figueiredo, 2007). In fact, understanding the real context made us question whether the dependent person is not being consigned to a situation of passiveness based on the social assumption imposed by the role of

"patient". Replacing and being replaced is often easier and less time consuming than promoting agency and acting against the deficits, thus reinforcing that, in self-care, the most common caregiver-dependent person interaction patterns are the maintenance and promotion of dependence. In some, if not in many, situations, the surrounding social environment tends to ignore the capacities of the individual, encouraging and reinforcing their dependence, and the prevalent concept of caring becomes a synonym of doing for the dependent person (Andrade, 2009). This situation was also observed in this research study. These aspects emphasize the need to develop interventions closer to the dependent person so as to promote his/her autonomy and independence. These interventions are an enormous challenge and a responsibility for the health system, particularly for Nursing. Therefore, the nurse would, for example, play a central role in teaching and instructing adaptive strategies which facilitate the performance of self-care activities, as well as train the dependent person's skills, thus decreasing the dependence level in some situations. It is true that skills training to progressively become more independent would positively contribute to involving the dependent person and, consequently, to the relearning of some self-care activities. In this way, we would be working towards the maximisation of independence and the safe performance of self-care activities. The potential of the Nursing intervention, within the reality under analysis, is huge, mainly through therapeutic strategies aiming at empowering for self-care. Hence, strategies capable of promoting a more intensive follow-up of dependent people integrated into families ought to be considered, in the sense that Nursing care may be an important contribution to health gains and an opportunity to practice "Nursing with more Nursing" (Silva, 2007, p. 12). Despite the assumed methodological robustness of this study, some limitations must be pointed out. The fact that this is a cross-sectional study limits the understanding of an issue which is unquestionably mutable over time. Also, although the quantitative approach provides an epidemiological characterization, it does not give us an understanding of the experiences of dependent people and their families. Method triangulation would contribute to planning care in line with the real health needs in this area, which is undoubtedly a focus of Nursing intervention.

## Conclusion

Nowadays, the existence of people with different dependence levels in self-care activities is a reality in the so-called developed societies. The problem is that the insufficient characterization of people's (in) ability to perform self-care activities has hindered the professional nursing practice. The results of this study describe an epidemiological reality which needs to be taken into account in health services. The families and, in particular caregivers, cannot do everything for themselves, nor can they provide the necessary responses, especially when these are long-term extremely complex processes. By describing the contexts surrounding dependence, as well as the profile of self-care-dependent-people integrated in families, this research study may contribute to enhance nursing practice. Hence, improving nursing interventions so as to meet the specific needs of dependent people and family caregivers may be crucial for the quality of nursing practice, providing a unique opportunity to make a difference in people's lives. Simultaneously, a more in-depth knowledge of the self-care activities may allow for a more proactive approach to the issue, thus fostering preventive interventions and individualized care in the future. Therefore, in addition to the importance of conducting this study in other municipalities, as well as of the need to conduct a longitudinal study, we suggest further qualitative studies, where it would be important to explore the role of the dependent person in performing self-care activities by identify the facilitating/inhibiting factors to the promotion of autonomy, as well as the role of the family in this process.

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