



Characterization of nursing care provided to older adults in an emergency department: a retrospective study in Santiago de Cuba

Caracterización de los cuidados de enfermería en adultos mayores atendidos en un servicio de urgencias: estudio retrospectivo en Santiago de Cuba

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ABSTRACT

Introduction: Population ageing has increased the demand for care in emergency departments, where older adults require comprehensive geriatric nursing care due to multimorbidity, frailty, and functional dependence. **Objective:** To characterize the nursing care provided to older adults treated in the emergency department of the "Roberto Infante Pascual" General Hospital during the period from February to July 2024. **Methods:** An observational, descriptive, retrospective, cross-sectional study was conducted. A total of 2,138 patients aged 60 years and older who attended the emergency department during the study period were included. Data were collected through a review of nursing records and emergency department records and analyzed using descriptive statistics with absolute and relative frequencies. **Results:** Male patients predominated (69.7%). The most frequent diagnoses were nonspecific viral illness (16.3%) and diabetes mellitus (14.4%). Nursing care was primarily focused on monitoring vital signs (100%), surveillance of complications (86.5%), and medication administration (82.3%). Analysis by diagnosis showed that the nursing interventions were generally consistent with the patients' clinical needs; however, referrals to social work were infrequent (19.6%). **Conclusions:** Geriatric nursing care in the emergency department was primarily oriented toward immediate clinical stabilization. Although the interventions addressed the most frequent diagnoses, the limited incorporation of comprehensive geriatric assessment and an interdisciplinary approach highlights opportunities to strengthen person-centered care for older adults.

Keywords: older adult; nursing care; geriatric nursing; hospital emergency service.

RESUMEN

Introducción: el envejecimiento poblacional ha incrementado la demanda de atención en los servicios de urgencias, donde los adultos mayores requieren cuidados de enfermería integrales debido a la multimorbilidad, la fragilidad y la dependencia funcional. **Objetivo:** caracterizar los cuidados de enfermería brindados a los adultos mayores atendidos en el servicio de urgencias del Hospital General "Roberto Infante Pascual", durante el período comprendido de febrero a julio de 2024. **Métodos:** estudio observacional, descriptivo, retrospectivo y de corte transversal. Se incluyeron los 2 138 pacientes de 60 años y más atendidos durante el período de estudio. La información se obtuvo mediante la revisión de registros de enfermería y del servicio de urgencias y se procesó mediante estadística descriptiva utilizando frecuencias absolutas y relativas. **Resultados:** predominó el sexo masculino (69,7 %). Los diagnósticos más frecuentes fueron la virosis inespecífica (16,3 %) y la diabetes mellitus (14,4 %). Los cuidados de enfermería estuvieron dirigidos principalmente al control de signos vitales (100 %), la vigilancia de complicaciones (86,5 %) y la administración de medicamentos (82,3 %). El análisis según diagnóstico mostró concordancias con las necesidades clínicas de los pacientes; sin embargo, la interconsulta con trabajo social fue poco frecuente (19,6 %). **Conclusiones:** Los cuidados de enfermería geriátrica en el servicio de urgencias se orientaron fundamentalmente a la estabilización clínica inmediata. Aunque las intervenciones respondieron a los diagnósticos más frecuentes, la escasa incorporación de la valoración geriátrica integral y del abordaje interdisciplinario evidencia oportunidades para fortalecer la atención centrada en la persona mayor.

Palabras clave: adulto mayor; cuidados de enfermería; enfermería geriátrica; servicio de urgencia en hospital.

INTRODUCTION

El envejecimiento poblacional constituye uno de los principales desafíos demográficos contemporáneos, con importantes repercusiones para los sistemas de salud a nivel global. Este fenómeno se caracteriza por un incremento progresivo de la población de 60 años y más, asociado a una mayor esperanza de vida y al aumento de enfermedades crónicas, fragilidad, discapacidad y dependencia funcional. En este sentido, los servicios de salud, particularmente los servicios de urgencias, enfrentan una creciente demanda de atención por parte de este grupo etario, que presenta con frecuencia necesidades complejas y multidimensionales.(1)

From a historical perspective, care for older adults has evolved from a disease-centered approach to a comprehensive model that considers the biological, psychological, and social dimensions of aging.(2) Geriatric nursing has gained increasing prominence through the incorporation of comprehensive assessment tools, individualized care plans, and strategies to promote autonomy and prevent complications. In emergency services, this approach is particularly relevant given the clinical complexity of geriatric patients, who frequently present with multimorbidity, polypharmacy, and atypical disease manifestations.(3,4)

Se estima que la población mundial de personas de 60 años o más se habrá duplicado (2100 millones). De igual forma, el número de personas de 80 años o más se triplique entre 2020 y 2050, hasta alcanzar los 426 millones.(5) En América Latina y el Caribe, este proceso ocurre de manera acelerada, con un incremento significativo de la población envejecida en las últimas décadas. En Cuba, según datos de la Oficina Nacional de Estadística e Información, el envejecimiento poblacional alcanza el 25,7 %, lo que posiciona al país entre los más envejecidos de América Latina y el Caribe. Actualmente, uno de cada cuatro cubanos tiene 60 años o más, fenómeno asociado a la baja natalidad, el saldo migratorio negativo y el incremento sostenido de la esperanza de vida.(6)

In recent years, specific geriatric care models have been developed for emergency departments, aimed at improving care quality and reducing complications in older adults. These include age-friendly emergency units, comprehensive geriatric assessment at triage, and interdisciplinary models focused on frailty, functionality, and social risk. These strategies have demonstrated benefits in early risk identification, reduction in readmissions, and optimization of nursing care for complex geriatric patients.

In Cuba, research specifically aimed at characterizing nursing care for older adults in emergency services is limited, particularly in municipal hospitals. At the “Roberto Infante Pascual” General Hospital, no prior published studies on this topic were identified.

In line with the foregoing, it is justified to conduct research that describes and analyzes the nursing care provided to older adults in emergency services, in order to identify care patterns, care needs, and areas for improvement. These elements are essential for strengthening professional practice and improving health services for this population group.

Based on the foregoing, the present study aims to characterize the nursing care provided to older adults treated in the emergency department of the General Hospital “Roberto Infante Pascual”, during the period from February to July 2024.

METHODS

Se realizó un estudio observacional, descriptivo, retrospectivo y de corte transversal con el objetivo de caracterizar los cuidados de enfermería brindados a los adultos mayores atendidos en el servicio de urgencias del Hospital General “Roberto Infante Pascual”, ubicado en el municipio Songo-La Maya, provincia Santiago de Cuba, durante el período comprendido de febrero a julio de 2024.

All patients aged 60 years and older seen in the emergency department during the study period who had clinical records in the nursing charge sheets were included. During the review of the records, no cases with incomplete, illegible, or duplicate information meeting the exclusion criteria were identified, so the final sample matched the total number of registered patients (2 138 cases).

The analyzed variables were grouped according to their nature. Among the sociodemographic variables, sex (male and female) and month of care (February to July) were included. Regarding clinical variables, the main diagnosis recorded in the emergency department was considered, including osteomioarticular diseases, cardiovascular diseases, cerebrovascular accidents, diabetes mellitus, cancer, nonspecific virosis, acute diarrheal disease, acute and chronic respiratory infections, specific virosis, and home accidents.

Likewise, variables related to nursing care were studied, including vital sign monitoring, complication surveillance, medication administration, psychological and emotional support, health education, fall prevention and safety measures, assessment of frailty level, support in basic activities of daily living, and consultation with social work. These cares were identified from the records entered in the nursing charge sheets and quantified according to their frequency of application in the patients treated.

The information was obtained through documentary review of nursing charge sheets and statistical records of the emergency department. For data collection, a form designed by the researchers was used, which allowed standardization of the collected information and facilitated its subsequent processing.

The data were organized in a database and processed using Epi Info version 6. Descriptive statistics were used, with absolute and relative frequencies as summary measures for qualitative variables. The results were presented in frequency distribution tables to facilitate their analysis and interpretation, and relationships between the main diagnoses and the predominant nursing care were established.

The research was approved by the Scientific Council and the Research Ethics Committee of the General Hospital "Roberto Infante Pascual", with approval recorded under code 43. The ethical principles established in the Declaration of Helsinki for research involving human subjects were respected. The information obtained was anonymized and used exclusively for scientific purposes, ensuring patient confidentiality. Given the retrospective nature of the study and the use of institutional records, individual informed consent was not required.

Results

Table 1 shows that April had the highest number of patients seen (425 cases, 19.8% of the total), followed by June (398 patients, 18.6%) and May (378 patients, 17.6%). Males predominated, with 1491 patients (69.7%).

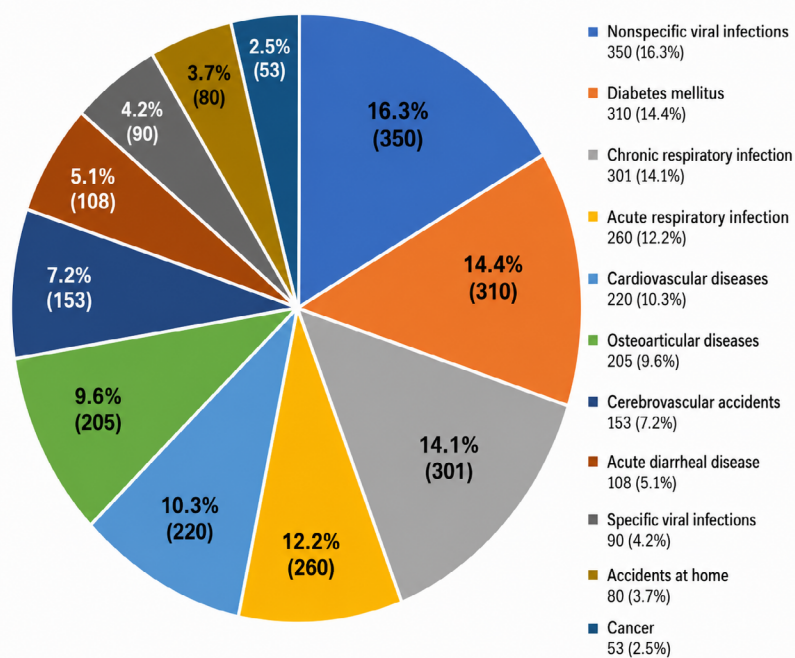
Table 1. Number of geriatric patients treated in the emergency department.

Months	SEX	TOTAL				
	MALE	FEMALE				
	No	%	No	%	No	%
February	162	7,57	86	4,02	248	11,5
March	216	14,4	101	15,6	317	14,8
April	245	16,4	180	27,8	425	19,8
May	281	18,8	97	14,9	378	17,6
June	298	19,9	100	15,4	398	18,6
July	289	19,3	83	12,8	372	17,3
Total	1491	69,7	647	30,2	2138	100

In Image 1, the most frequent diagnosis was nonspecific virosis (350 cases, 16.3%), followed by chronic respiratory infection (301 patients, 14.7%) and diabetes mellitus (310 patients, 14.4%).

Table 2 shows that vital signs monitoring was performed in all patients (2138; 100%), followed by complication surveillance in 1850 patients (86.5%) and medication administration in 1760 cases (82.3%).

Table 3 shows that vital sign monitoring was performed in all patients, regardless of diagnosis. Medication administration was most frequent in patients with diabetes mellitus (96.8%) and cardiovascular diseases (92.9%), while complication monitoring was most frequent in cerebrovascular accidents (94.4%) and cardiovascular diseases (90.5%). Furthermore, health education was more frequently applied in patients with diabetes mellitus (90.3%), whereas social work consultation was the least frequently used intervention across all diagnostic groups, with the highest frequency (45.8%) in cancer patients.

Image 1. Distribution of geriatric patients by main diagnosis in the emergency department.**Table 2. Main nursing care applied to geriatric patients in the emergency department.**

Nursing Care	No	%
Vital signs monitoring	2138	100
Surveillance of complications	1850	86,5
Medication administration	1760	82,3
Psychological and emotional support	1620	75,7
Health education	1495	69,9
Fall prevention and safety	1380	64,5
Assessment of degree of frailty	1205	56,3
Support for basic activities	980	45,8
Social work consultation	420	19,6

Discussion

The main finding of this study was the predominance of nursing care aimed at immediate clinical stabilization of older adults, especially vital sign monitoring, surveillance of complications, and medication administration, while interdisciplinary interventions were less frequent. This pattern demonstrates a focus on resolving acute problems, with limited incorporation of comprehensive geriatric assessment.

The predominance of male patients is consistent with that reported by Silva et al. (7); however, it differs from the results of Aalam et al. (8), who reported greater use of emergency services by women. These differences are probably due to demographic and organizational variations between health systems, indicating that demand patterns depend on the context in which care is provided.

Respiratory infections were the most common diagnosis, consistent with that reported by Águila-Trujillo et al. (9). Likewise, Bunn et al. (10) indicate that multimorbidity increases the clinical complexity of older adults and leads to increased demand for care, which explains the predominance of interventions aimed at monitoring and immediate treatment observed in this study.

Although vital sign monitoring was performed in all patients, this finding should not be interpreted in isolation as an indicator of quality of care.

Table 3. Relationship between the main diagnosis and the nursing care applied to geriatric patients treated in the emergency department.

Diagnosis (n)	Vital signs monitoring	Complication surveillance	Medication administration	Health education	Mobility / Frailty	Hydration / Oxygen	Social work consultation
Musculoskeletal (310)	310 (100%)	270 (87.0%)	250 (80.6%)	200 (64.5%)	290 (93.5%)	40 (12.9%)	45 (14.5%)
Cardiovascular (420)	420 (100%)	380 (90.4%)	390 (92.8%)	260 (61.9%)	110 (26.1%)	35 (8.3%)	60 (14.2%)
Cerebrovascular accidents (180)	180 (100%)	170 (94.4%)	160 (88.8%)	90 (50.0%)	150 (83.3%)	20 (11.1%)	30 (16.6%)
Diabetes mellitus (310)	310 (100%)	260 (83.8%)	300 (96.7%)	280 (90.3%)	90 (29.0%)	25 (8.0%)	40 (12.9%)
Cancer (120)	120 (100%)	110 (91.6%)	100 (83.3%)	85 (70.8%)	60 (50.0%)	20 (16.6%)	55 (45.8%)
Nonspecific viral infection (350)	350 (100%)	300 (85.7%)	280 (80.0%)	250 (71.4%)	60 (17.1%)	330 (94.2%)	20 (5.7%)
Acute diarrheal disease (140)	140 (100%)	120 (85.7%)	100 (71.4%)	110 (78.5%)	30 (21.4%)	135 (96.4%)	10 (7.1%)
Acute respiratory infection (220)	220 (100%)	200 (90.9%)	180 (81.8%)	140 (63.6%)	50 (22.7%)	210 (95.4%)	25 (11.3%)
Chronic respiratory infection (150)	150 (100%)	140 (93.3%)	130 (86.6%)	120 (80.0%)	60 (40.0%)	145 (96.6%)	20 (13.3%)
Specific virosis (80)	80 (100%)	70 (87.5%)	60 (75.0%)	55 (68.7%)	20 (25.0%)	75 (93.7%)	5 (6.2%)
Home accidents (58)	58 (100%)	50 (86.2%)	45 (77.5%)	40 (68.9%)	52 (89.6%)	10 (17.2%)	8 (13.7%)

Note: Data are expressed as number of patients (n) and percentage (%) calculated relative to the total number of patients for each diagnosis.

Ríos Paredes (11) recognizes this intervention as essential, while Franco Márquez et al. (12) emphasize the importance of psychological support and health education, which were also identified in this study. However, international recommendations emphasize that quality geriatric care must also incorporate functional, cognitive, social, and frailty assessment through a multidimensional approach (1,13,14), aspects that were poorly represented in the recorded care.

A notable finding was the low frequency of referrals to social work, which indicates limited integration of the biopsychosocial approach. This result contrasts with international models of geriatric emergency care, where participation of multidisciplinary teams is an essential component for identifying social needs, planning discharge, and reducing adverse events (1,14). Therefore, this study identifies a clear opportunity for improvement in nursing practice through the systematic incorporation of comprehensive geriatric assessment and tools such as the Edmonton Frail Scale from triage.

The findings also provide local evidence on the organization of nursing care in a Cuban emergency department. Unlike previous national studies, which mainly focused on the epidemiological profiles of older adults (9), this research characterizes the nursing interventions performed, identifying strengths in basic care and gaps in the interdisciplinary approach—information useful for guiding strategies to improve care quality.

Limitations of the study include its retrospective design, which prevents the establishment of causal relationships; the use of clinical records, which are susceptible to information bias due to incomplete documentation; the lack of evaluation of outcomes such as mortality, readmissions, or functional decline; and its conduct in a single hospital center, which limits the generalizability of the results. Nevertheless, a strength is that it is among the first studies at this institution to specifically characterize nursing care for older adults in the emergency department, providing useful evidence to optimize geriatric care models.

CONCLUSIONS

The nursing care provided to older adults treated in the emergency department of the General Hospital “Roberto Infante Pascual” was characterized by a predominance of male patients and infectious and chronic diseases, with interventions focused mainly on vital sign monitoring, surveillance of complications, and medication administration. Although the care provided was, in general, consistent with the clinical needs arising from the most frequent diagnoses, the limited use of social work referrals and comprehensive geriatric assessment reveals opportunities to strengthen the interdisciplinary approach and person-centered care for older adults in emergency services.

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CONFLICT OF INTEREST

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