

HOW TO GUARANTEE QUALITY IN THE ORGANIZATION OF CARE IN EAST TIMOR: A NURSING VIEW

COMO GARANTIR A QUALIDADE NA ORGANIZAÇÃO DOS CUIDADOS EM
TIMOR-LESTE: UMA VISÃO DA ENFERMAGEM

CÓMO GARANTIZAR LA CALIDAD EN LA ORGANIZACIÓN DE LA ATENCIÓN
EN TIMOR ORIENTAL: UNA PERSPECTIVA DE ENFERMERÍA

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ABSTRACT

Introduction: This study analyzes the quality of nurses' work in East Timor, using Donabedian's nursing quality model, which assesses structural, procedural and outcome dimensions. The Timorese health system, centered on Primary Health Care (PHC), faces significant challenges, such as a shortage of health professionals and a lack of adequate infrastructure. However, important advances have been made, such as the training of human resources and the implementation of community health programs, with the collaboration of international organizations. **Objectives:** The aim of this study was to analyze nurses' perceptions of the organization of nursing care in East Timor, identifying the conditions necessary to guarantee the quality of the service and the impact of public policies in this context. **Methodology:** A quantitative, descriptive, correlational and exploratory study was carried out with 310 nurses in East Timor, using a structured questionnaire. The independent variables analyzed were sociodemographic characteristics and the dependent variables: conditions facilitating quality work; nature of the work and activities performed by nurses; needs for improvement in nurses' work; weaknesses in nurses' work. **Results:** The results showed that PHC is the basis of the health system, serving most of the population. Standards of practice are considered essential for the quality of healthcare provided, with 42.9% of nurses considering them "very important". Collaboration between professionals is highlighted by 44.2% of respondents as crucial. In addition, 49.7% say that graduate training is fundamental to improving the quality of healthcare. **Conclusion:** The study highlights the urgent need to improve the quality of nursing care in East Timor, through investments in continuing education, improvements in infrastructure and the implementation of public policies that respond more effectively to the needs of the population.

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Collaboration between professionals and active community participation are also key to strengthening the health system. These results suggest that, despite progress, further improvement is needed to ensure the effectiveness and safety of health services.

Keywords: Nursing. Quality of Health Care. Primary Health Care. Health Promotion. Human Resources in Health. Nursing Education.

RESUMO

Introdução: O presente estudo analisa a qualidade do trabalho dos enfermeiros em Timor-Leste, recorrendo ao modelo de qualidade de enfermagem de Donabedian, o qual avalia as dimensões estruturais, processuais e de resultados. O sistema de saúde timorense, centrado na atenção primária à saúde, enfrenta desafios significativos, como a escassez de profissionais de saúde e a falta de infraestruturas adequadas. No entanto, foram feitos avanços importantes, como a formação de recursos humanos e a implementação de programas de saúde comunitária, com a colaboração de organizações internacionais. **Objetivos:** O presente estudo teve como objetivo analisar a percepção dos enfermeiros sobre a organização dos cuidados de enfermagem em Timor-Leste, identificando as condições necessárias para garantir a qualidade do serviço e o impacto das políticas públicas nesse contexto. **Metodologia:** Foi realizado um estudo quantitativo, descritivo, correlacional e exploratório com 310 enfermeiros em Timor-Leste, utilizando um questionário estruturado. As variáveis independentes analisadas foram as características sociodemográficas e as variáveis dependentes: condições facilitadoras de um trabalho de qualidade; natureza do trabalho e atividades desempenhadas pelos enfermeiros; necessidades de melhoria do trabalho dos enfermeiros; debilidades no trabalho dos enfermeiros. **Resultados:** Os resultados mostraram que a APS é a base do sistema de saúde, atendendo a maior parte da população. As normas de atuação são consideradas essenciais para a qualidade dos cuidados de saúde prestados, com 42,9% dos enfermeiros a considerá-las "muito importantes". A colaboração entre profissionais é destacada por 44,2% dos inquiridos como crucial. Além disso, 49,7% afirmam que a formação em licenciatura é fundamental para melhorar a qualidade dos cuidados de saúde. **Conclusão:** o estudo destaca a necessidade urgente de melhorar a qualidade dos cuidados de enfermagem em Timor-Leste, através de investimentos em formação contínua, melhorias na infraestrutura e na implementação de políticas públicas que respondam de forma mais eficaz às necessidades da população. A colaboração entre profissionais e a participação ativa da comunidade são igualmente fundamentais para o fortalecimento do sistema de saúde. Estes resultados sugerem que, apesar dos avanços, é necessário continuar a melhorar para garantir a eficácia e a segurança dos serviços de saúde.

Palavras-chave: Enfermagem. Qualidade da Assistência à Saúde. Atenção Primária à Saúde. Promoção da Saúde. Recursos Humanos em Saúde. Educação em Enfermagem.

RESUMEN

Introducción: Este estudio analiza la calidad del trabajo de los enfermeros en Timor Oriental, utilizando el modelo de calidad en enfermería de Donabedian, que evalúa las dimensiones estructurales, de proceso y de resultados. El sistema de salud timorense, centrado en la Atención Primaria de Salud (APS), enfrenta importantes desafíos, como la escasez de profesionales de la salud y la falta de infraestructura adecuada. Sin embargo, se han logrado avances significativos, como la capacitación de recursos humanos y la implementación de programas de salud

comunitaria, con la colaboración de organizaciones internacionales. Objetivos: El objetivo de este estudio fue analizar las percepciones de los enfermeros sobre la organización de los cuidados de enfermería en Timor Oriental, identificando las condiciones necesarias para garantizar la calidad del servicio y el impacto de las políticas públicas en este contexto. Metodología: Se realizó un estudio cuantitativo, descriptivo, correlacional y exploratorio con 310 enfermeros en Timor Oriental, utilizando un cuestionario estructurado. Las variables independientes analizadas fueron las características sociodemográficas y las variables dependientes: condiciones que facilitan un trabajo de calidad; naturaleza del trabajo y actividades realizadas por los enfermeros; necesidades de mejora en el trabajo de los enfermeros; debilidades en el trabajo de los enfermeros. Resultados: Los resultados mostraron que la APS constituye la base del sistema de salud, atendiendo a la mayoría de la población. Las normas de práctica son consideradas esenciales para la calidad de la atención brindada, siendo valoradas como “muy importantes” por el 42,9% de los enfermeros. La colaboración entre profesionales es destacada por el 44,2% de los encuestados como un factor crucial. Además, el 49,7% afirma que la formación de posgrado es fundamental para mejorar la calidad de la atención en salud. Conclusión: El estudio resalta la necesidad urgente de mejorar la calidad de los cuidados de enfermería en Timor Oriental, a través de inversiones en educación continua, mejoras en la infraestructura y la implementación de políticas públicas que respondan de manera más eficaz a las necesidades de la población. La colaboración entre profesionales y la participación de la comunidad también son clave para el fortalecimiento del sistema de salud. Estos resultados sugieren que, a pesar de los avances, es necesario seguir mejorando para garantizar la efectividad y seguridad de los servicios de salud.

Palabras clave: Enfermería. Calidad de la Atención en Salud. Atención Primaria de Salud. Promoción de la Salud. Recursos Humanos en Salud. Educación en Enfermería.



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INTRODUCTION

The quality of nurses' work is widely discussed through several theories and models that seek to explain and improve the impact of nursing practices on health outcomes. One of the most recent theories addressing nursing quality is Donabedian's Nursing Quality Model, which suggests that the quality of care can be measured based on three dimensions: structure, process and outcomes (Donabedian, 2023). The “structure” refers to the conditions in which care is provided, such as resources and the working environment; the “process” describes the way care is provided, including the competence of nurses and communication with patients; and the “outcomes” are related to the effects of care on the patient's health.

According to the same author, regarding there three main dimensions: the “structure”, includes factors such as the physical environment and human resources; the “process”, which

covers the daily care provided by nurses, including clinical practices and interaction with patients; and the “outcomes”, which reflect the effects of this care on patients' health, such as reducing complications and improving recovery. This model offers a systematic approach to measuring the quality of nurses' work and is fundamental to the continuous improvement of practice and to promoting safe and efficient care.

The applicability of the Donabedian model makes it possible to identify areas for improvement in professional training and working conditions, directly impacting on the quality of care provided.

The quality of care provided by nursing is one of the essential pillars for guaranteeing patient safety and the effectiveness of treatments in numerous healthcare settings, from hospitals to home care. In recent years, the quality of nurses' work has been the subject of a growing number of studies, and has been discussed at various levels, from academic training to daily clinical practice. Recent literature highlights that the quality of nursing care is not only related to technical knowledge, but also to success soft skills empathy, effective communication and the ability to adapt to highly complex contexts (Gunningberg *et al.*, 2023).

Studies also suggest that the quality of nurses has a direct impact on patients' health outcomes, including reducing complications and improving patient satisfaction (Bäckman *et al.*, 2022).

In addition, the quality of nursing practice is also closely linked to the working environment, and human resources, and conditions such as workload, the presence of competent leaders and the implementation of evidence-based practices positively influence the provision of high-quality care (Sitzman & Eichelberger, 2023). Health policies and professional practice evaluation systems also play a key role in promoting a high standard of quality in nursing care, reinforcing the need for continuous training and motivation strategies for nursing professionals.

East Timor health system, which has been constantly evolving since its independence, aims to improve the quality of life of its population, addressing both public health and individual care. The organization of health care in the country is structured around a network of public and private services that aims to guarantee the accessibility and effectiveness of health care for all citizens, even in the most remote regions.

The structure of the Timorese health system is made up of various levels of care, including referral hospitals, health centers and community health posts. The primary health network, which is considered the heart of the system, has primary health care (PHC) as its focus. Primary Health

Care (PHC) in East Timor is not limited to treating illnesses but also aims to prevent and promote health and reduce inequalities in access to health care. The implementation of public health strategies and community education are essential components of this approach.

The organization of healthcare is the responsibility of the Ministry of Health, which coordinates health policies and oversees infrastructure and human resources. The primary care network is decentralized and organized to provide basic health services throughout the country.

However, the health system faces significant challenges. The shortage of qualified health professionals, especially medical and nurses, is a major obstacle to providing quality care. Despite progress in training local professionals and creating international partnerships, there is an urgent need to further train human resources and distribute them more equitably across the various regions of the country. In addition, East Timor's health system is characterized by a still-developing infrastructure, limiting its ability to provide advanced care and complex treatments.

To face these challenges, East Timor has invested in partnerships with international organizations, such as the World Health Organization (WHO), and in the implementation of continuous training programs for health professionals, as well as in efforts to improve working conditions and health financing. The use of information and communication technologies has also been a strategy to overcome geographical limitations and improve healthcare management.

Since its independence, the health care organization system in East Timor has evolved significantly, with an emphasis on the implementation of Primary Health Care (PHC) as a central strategy for improving the health of the population. The Timorese health system is made up of a network of public and private services, including hospitals, health centers and community health posts, the Ministry of Health is responsible for coordinating and supervising these institutions, with the aim of guaranteeing accessible, quality healthcare for all citizens.

East Timor National Health System induces several levels of health services, they induce 65 community health centers serve as reference health units for communities, 200 health posts that provide basic health care to local populations) and 600 sisca posts, that are part of the integrated community health service, offering primary health services directly to communities.

OBJECTIVE

to analyze nurses' opinions on the organization of nursing care to ensure its quality and to identify the conditions for intervention to improve nursing care.

The starting question is: how do nurses in East Timor perceive the conditions necessary to carry out their work with quality?

METHODOLOGY

This study adopts a quantitative, correlational and exploratory descriptive approach. The target population consists of 1,276 nurses in East Timor. The study sample consisted of 310 nurses, guaranteeing a 95% confidence level and a 5% margin of error.

The participants work in various areas, including teaching, hospitals, communities and other institutions, spread across the municipalities of Dili, Baucau, Manatuto, Aileu, Liquisa and Bobonaro. The study aims to understand the perceptions of these professionals about the factors that influence the quality of health care in the country. The diversity of practice areas allowed for a comprehensive view of the challenges and needs faced by nurses, contributing to the identification of essential improvements to strengthen the profession and the quality of care provided.

The variables under study were independent sociodemographic characteristics and dependent characteristics that facilitate quality work, the nature of the work and activities performed by nurses, needs for improvement in nurses' work and weaknesses in nurses' work. Dimensions and evaluation criteria from 1 to 5 were created for the variables.

Data was collected using a questionnaire, in which the questions were formulated based on the dimensions, and it was possible to choose one of five response categories on a Likert scale: "Not important" (1), "Not very important" (2), "Important" (3), "Very important" (4) and "Fundamental" (5). After analyzing the internal consistency, a Cronbach's alpha of 0.961 was found, indicating excellent internal consistency between the items of the instrument used. Data collection took place in East Timor between January and September 2024.

The data collected was analyzed using the statistical analysis software SPSS version 29.0.0 (Statistical Package for the Social Sciences), using absolute and relative frequencies, the measure of central tendency, the measure of dispersion and the Mann-Whitney non-parametric U test for independent samples, considering that the variable does not follow a normal distribution.

The study was carried out with the due authorization of the Ethics Committee of the National Institute of Public Health of East Timor, under protocol number Ref:01INSP-TL/UEPD/I/2024, ensuring ethical and legal compliance for conducting research throughout the

national territory.

Results

The study involved 310 nursing professionals working in different areas, including teaching, hospitals, communities and other contexts. Of the total number of participants, 58.1% were female and 41.9% male.

The age of the participants ranged from 20 to 64 years, with an average of 32.29 years and a standard deviation of 9.146.

Length of service ranged from 1 to 37 years, with an average of 7.83 years and a standard deviation of 8.904.

As for academic qualifications, 4.8% had technical or vocational training, 42.6% had a bachelor's degree, 51.3% had a bachelor's degree and 1.3% had a master's degree.

As for where they work, 11.6% work in education (teaching), 36.5% in hospital, 50.6% in communities and 1.3% elsewhere.

As for continuing training, we found that only 2.3% had attended training before 1990, with this figure rising slightly to 3.2% between 2001 and 2010 and a more marked increase between 2011 and 2020 (44.2%) and after 2021 (49.0%).

Table 1 - Distribution of the variable conditions for exercise.

Dimensions	Criteria	Nº	%
Nurses' knowledge is fundamental to guaranteeing the quality of care	Not important	3	1.0
	Not very important	5	1.6
	Important	59	19.0
	Very important	120	38.7
	Fundamental	123	39.7
The existence of standards of practice is fundamental to guaranteeing the quality of care	Not important	3	1.0
	Not very important	4	1.3
	Important	84	27.1
	Very important	133	42.9
	Fundamental	86	27.7
Recognizing partnerships with other professionals and service managers	Not important	3	1.0
	Not very important	9	2.9
	Important	87	28.1
	Very important	137	44.2
	Fundamental	74	23.9
Following the rules and guidelines of superiors and the profession	Not important	5	1.6
	Not very important	8	2.6
	Important	78	25.2
	Very important	137	44.2
	Fundamental	82	26.5
Participating in associations	Not important	12	3.9
	Not very important	27	8.7

	Important	100	32.3
	Very important	108	34.8
	Fundamental	63	20.3
Being recognized as a health professional	Not important	3	1.0
	Not very important	2	0.6
	Important	45	14.5
	Very important	131	42.3
	Fundamental	129	41.6
Developing treatments	Not important	5	1.6
	Not very important	5	1.6
	Important	74	23.9
	Very important	145	46.8
	Fundamental	81	26.1
Secondary (SPK) Vocational Health Technician	Not important	56	18.1
	Not very important	55	17.7
	Important	71	22.9
	Very important	86	27.7
	Fundamental	42	13.5
Bachelor's degree	Not important	16	5.2
	Not very important	34	11.0
	Important	105	33.9
	Very important	115	37.1
	Fundamental	40	12.9
Degree	Not important	4	1.3
	Not very important	5	1.6
	Important	63	20.3
	Very important	154	49.7
	Fundamental	84	27.1
Masters Specialist	Not important	5	1.6
	Not very important	9	2.9
	Important	56	18.1
	Very important	135	43.5
	Fundamental	105	33.9
Doctorate	Not important	7	2.3
	Not very important	10	3.2
	Important	46	14.8
	Very important	116	37.4
	Fundamental	131	42.3

Source: Authors

To guarantee the quality of care, the participants in the study say that nurses' knowledge is fundamental, an opinion shared by 39.7% of the nurses, followed by the opinion that it is very important for 38.7%.

As for the existence of standards to guarantee the quality of care, 27.7% of the participants consider them fundamental, followed by 42.9% who consider them very important.

Recognizing partnerships with other professionals and managers is considered very important by 44.2% of participants, while 23.9% consider it fundamental.

Following the rules and guidelines of superiors and the profession is considered very important by 44.2% of participants, while 26.5% consider this practice fundamental.

Participation in associative movements was considered very important by 34.8% of participants, with 20.3% considering it fundamental.

Recognition as a health professional is considered fundamental by 41.6% of the participants, while 42.3% consider it very important.

The development of treatments is considered very important by 46.8% of the participants, while 26.1% consider it fundamental.

About academic training, 27.7% of participants consider secondary training (Vocational Health Technician) to be very important, while 13.5% consider it to be fundamental.

Regarding a bachelor's degree, 37.1% of participants consider it very important, followed by 12.9% who consider it fundamental.

As for academic training, 49.7% of the participants consider a degree to be very important and 27.1% consider it to be fundamental.

As for a specialist master's degree, 43.5% consider it very important, followed by 33.9% who consider it fundamental.

As for the doctorate, 42.3% consider it fundamental, while 37.4% consider it very important.

Table 2 - Distribution of the variable nature of work and activities performed by nurses.

Dimensions	Criteria	Nº	%
Vaccination	Not important	13	4.2
	Not very important	4	1.3
	Important	64	20.6
	Very important	134	43.2
	Fundamental	95	30.6
Intervention in family health	Not important	10	3.2
	Not very important	11	3.5
	Important	72	23.2
	Very important	149	48.1
	Fundamental	68	21.9
Development of home care - home visits	Not important	11	3.5
	Not very important	30	9.7
	Important	81	26.1
	Very important	121	39.0
	Fundamental	67	21.6
Nursing consultations	Not important	7	2.3
	Not very important	10	3.2
	Important	74	23.9
	Very important	143	46.1
	Fundamental	76	24.5
Health promotion activities and healthy lifestyles	Not important	7	2.3
	Not very important	6	1.9
	Important	75	24.2
	Very important	133	42.9

	Fundamental	89	28.7
Health promotion and/or health surveillance activities	Not important	8	2.6
	Not very important	9	2.9
	Important	70	22.6
	Very important	142	45.8
	Fundamental	81	26.1

Source: Authors

Vaccination was considered very important by 43.2% of the participants, while 30.6% considered it essential.

Intervention in family health was rated as very important by 48.1% of participants, while 21.9% considered it essential.

The development of care at home, through home visits, was considered very important by 39.0% of the participants, while 21.6% rated it as fundamental.

The development of nursing consultations was rated as very important by 46.1% of the participants, while 24.5% considered it fundamental.

Activities to promote health and healthy lifestyles were rated as very important by 42.9% of participants, followed by 28.7% who considered them fundamental.

Health promotion and/or health surveillance activities were rated as very important by 45.8% of participants, while 26.1% rated them as fundamental.

Table 3 - Distribution of the variable needs for improvement in nurses' work processes.

Dimensions	Criteria	Nº	%
Community empowerment (teaching and training)	Not important	6	1.9
	Not very important	22	7.1
	Important	102	32.9
	Very important	120	38.7
	Fundamental	60	19.4
Community care	Not important	4	1.3
	Not very important	12	3.9
	Important	110	35.5
	Very important	128	41.3
	Fundamental	56	18.1
Specific consultations	Not important	16	5.2
	Not very important	18	5.8
	Important	74	23.9
	Very important	128	41.3
	Fundamental	74	23.9
Teaching in the community	Not important	8	2.6
	Not very important	14	4.5
	Important	106	34.2
	Very important	120	38.7
	Fundamental	62	20.0
Teaching people (teaching)	Not important	9	2.9
	Not very important	17	5.5

	Important	99	31.9
	Very important	118	38.1
	Fundamental	67	21.6
Treatments	Not important	7	2.3
	Not very important	3	1.0
	Important	74	23.9
	Very important	144	46.5
	Fundamental	82	26.5
Health promotion and healthy lifestyles	Not important	6	1.9
	Not very important	3	1.0
	Important	76	24.5
	Very important	134	43.2
	Fundamental	91	29.4
Little investment in health promotion	Not important	13	4.2
	Not very important	17	5.5
	Important	78	25.2
	Very important	139	44.8
	Fundamental	63	20.3

Source: Authors

Empowering the community through education and training was considered very important by 38.7% of the participants, while 19.4% considered it fundamental.

Care in the community was rated as very important by 41.3% of participants, followed by 18.1% who considered it fundamental.

Specific consultations were rated as very important by 41.3% of participants, while 23.9% considered them fundamental.

Teaching in the community was considered very important by 38.7% of participants, followed by 20.0% who considered it fundamental.

Teaching people was considered very important by 38.1% of the participants, while 21.6% considered it fundamental.

Treatments were considered very important by 46.5% of participants, with 26.5% considering them fundamental.

Health promotion and healthy lifestyles were rated as very important by 43.2% of participants, while 29.4% considered them fundamental.

Reduced investment in health promotion was considered very important by 44.8% of participants, followed by 20.3% who considered it fundamental.

Table 4 - Distribution of the variable weaknesses for nurses' work

Dimensions	Criteria	Nº	%
Lack of other resources (Infrastructure and Training)	Not important	13	4.2
	Not very important	19	6.1
	Important	82	26.5
	Very important	110	35.5
	Fundamental	86	27.7
Lack of organization in the care process	Not important	15	4.8
	Not very important	21	6.8
	Important	108	34.8
	Very important	113	36.5
	Fundamental	53	17.1
Lack of public involvement	Not important	16	5.2
	Not very important	18	5.8
	Important	114	36.8
	Very important	120	38.7
	Fundamental	42	13.5
Lack of human resources	Not important	12	3.9
	Not very important	22	7.1
	Important	72	23.2
	Very important	127	41.0
	Fundamental	77	24.8
Lack of material resources	Not important	11	3.5
	Not very important	16	5.2
	Important	75	24.2
	Very important	129	41.6
	Fundamental	79	25.5

Source: Authors

The lack of other resources, such as infrastructure and training, was considered very important by 35.5% of the participants, while 27.7% considered it fundamental.

The lack of organization in the care process was rated as very important by 36.5% of the participants, with 17.1% considering it fundamental.

The lack of public involvement was rated as very important by 38.7% of the participants, while 13.5% considered it fundamental.

The lack of human resources was considered very important by 41.0% of the participants, with 24.8% considering it fundamental.

The lack of material resources was considered very important by 41.6% of the participants, while 25.5% considered it fundamental.

When we analyzed the distribution of the dimensions of the four variables studied and the dimensions of the sociodemographic variable, for a significance level of 0.050, using the Mann-Whitney U-test for independent samples, we found that there were significant differences between the dimensions of the variables: facilitating conditions for quality work; nature of the work and activities performed by nurses; needs for improvement in nurses' work; weaknesses in

nurses' work and the dimensions of the sociodemographic variable.

According to the significance values obtained, we reject the null hypothesis in cases where $p > 0.050$, which indicates that there are no statistically significant differences. On the other hand, we reject the null hypothesis when $p \leq 0.050$, concluding that there are statistically significant differences between the groups analyzed.

Table 5 - Results of the distribution of facilitating conditions for quality work and sociodemographic variables with rejection of the null hypothesis.

Null hypothesis	$\leq 0,050$
The distribution of the existence of standards of practice that are fundamental to guaranteeing the quality of care is the same across gender categories.	.003
The distribution of secondary education (SPK) vocational health technician. is equal across gender categories.	.030
The distribution of whether nurses' knowledge is fundamental to guaranteeing the quality of care is the same across the categories of area of work.	.001
The distribution of the existence of standards of practice is fundamental to guaranteeing the quality of care is the same in the categories of area of work.	<.001
The distribution of the recognition of partnerships with other professionals and service managers is the same in the categories of work area.	<.001
The distribution of following the rules and guidelines of superiors and the profession is the same in the categories of work area.	<.001
The distribution of participation in associative movements is equal in the categories of work area.	<.001
The distribution of having recognition as a health professional is equal across the categories of work area.	<.001
The distribution of the bachelor's degree is equal in the categories of Area of work.	.003
The distribution of the Specialist Master's degree is the same in the area of work categories.	.001
The distribution of the Doctorate is equal in the categories of area of work.	<.001
The distribution of participation in associative movements is the same in the academic degree categories.	.018
The distribution of bachelor's degree is equal across academic degree categories.	<.001
The distribution of bachelor's degree is equal in the categories of length of service.	.025

Source: Authors

The opinions of the nurses who took part in the study show a different distribution in various dimensions of the variable “facilitating conditions for quality work”, in relation to the categories of gender, area of work, academic degree and length of service. More specifically, differences were identified in perceptions of standards of practice, nurses' knowledge, professional recognition, participation in association movements, academic training (bachelor's, licentiate, master's and doctorate) and compliance with superior rules and guidelines. These differences show how sociodemographic and professional characteristics influence perceptions

and practices related to the quality of healthcare.

Table 6 - Results of the distribution of the nature of the work and activities performed by nurses and the sociodemographic variables with the null hypothesis rejected.

Null hypothesis	$\leq 0,050$
The distribution of Health Promotion and/or Health Surveillance Activities is the same across gender categories.	.036
The distribution of Treatment development is equal across the categories of Area of work.	<.001
The distribution of Vaccination is equal across the categories of Area of work.	.023
The distribution of Intervention in family health is the same in the Area of work categories.	<.001
The Home care development - home visit distribution is the same in the Area of work categories.	<.001
The distribution of Development of nursing consultations is the same in the Work area categories.	.003
The distribution of Health promotion activities and healthy lifestyles is the same in the Work area categories.	.013
The distribution of Health promotion and/or health surveillance activities is the same in the Work area categories.	.001
The distribution of Intervention in family health is the same in the age class categories.	.047

Source: Authors

The results indicate that there are significant differences in various activities related to nursing practice belonging to the variable “nature of work and activities performed by nurses”, especially when considering the categories of gender, age and area of work.

Table 7 - Results of the distribution of nurses' work improvement needs and sociodemographic variables with the null hypothesis rejected.

Null hypothesis	$\leq 0,050$
The distribution of Capacity building in the community (teaching and training) is the same in the Work area categories.	<.001
The distribution of Care in the community is equal in the categories of Area of work.	<.001
The distribution of Specific consultations is the same in the Area of work categories.	.005
The distribution of Teaching in the community is the same in the Area of work categories.	<.001
The distribution of Teaching people (teaching) is the same in the Work area categories.	<.001
The distribution of Treatments is the same in the Area of work categories.	.012
The distribution of Health promotion and healthy lifestyles is the same in the Area of work categories.	.008
The distribution of Care in the community is equal in the continuing training categories	.012

The distribution of Care in the community is equal in the Nursing degree categories.	.027
The distribution of the lack of human resources is the same in the Nursing degree categories.	.026

Source: Authors

In general, when analyzing the variable “Needs for improvement in nurses' work”, the results indicate that the area of work significantly influences activities such as training and teaching in the community, care and consultations, treatments and health promotion, showing that the professional context plays an important role in the distribution of these practices. In addition, continuous training is also associated with differences in the care provided in the community. In relation to academic degree, the differences are less evident, being identified in specific aspects such as care in the community and the perception of a lack of human resources, which suggests that training has a more limited impact compared to the work environment.

Table 8 - Results of the distribution of nurses' work-related weaknesses and sociodemographic variables with rejection of the null hypothesis.

Null hypothesis	$\leq 0,050$.
The distribution of poor organization in the care process is the same in the categories of Area of work.	.006
The distribution of lack of involvement of the population is the same in the categories of Area of work.	<.001
The distribution of lack of material resources is the same in the categories of work area.	.019
The distribution of low investment in health promotion is the same across the categories of Area of work.	.047
The distribution of lack of human resources is the same in the continuing education categories	.016
The distribution of lack of other resources (infrastructure and training for nurses) is the same in the Nursing degree categories.	.014
The distribution of poor organization in the care process is the same in the Nursing degree categories.	.003
The distribution of lack of human resources is the same in the Nursing degree categories.	.026
The distribution of lack of material resources is the same in the Nursing degree categories.	.015
The distribution of poor organization in the care process is the same in the age class categories.	.013
The distribution of Lack of involvement of the population is the same across the age categories.	.017

Source: Authors

When analyzing the variable “Weaknesses in nurses' work”, the results indicate that there are significant differences in the perception of dimensions such as poor organization in the care

process, lack of material and human resources, little investment in health promotion and lack of involvement of the population, depending on the categories of area of work, continuous training, academic degree and age groups. These results suggest that perceptions of challenges and limitations in the care process vary according to professional context, level of training and age group.

In short, sociodemographic characteristics have a specific influence on the variables under study.

DISCUSSION

It is essential to step up investment in the continuous training and academic qualifications of nurses, as well as improving the structural conditions of health services, especially about human and material resources. These measures are fundamental to guaranteeing the quality of care, bearing in mind that professionals identify technical qualifications, the organization of the care process and community involvement as key elements for the good performance of their duties. In addition, health promotion and community education should be strategically valued, as they represent areas with high impact potential, but which still face structural and organizational limitations. Intervening in these areas will not only improve health outcomes but also strengthen the strategic role of nurses in primary care and public health.

The profile of the participants shows a predominance of females (58.1%), in line with the global trend of the feminization of the nursing profession. The average age of 32.29 years indicates a relatively young workforce, with implications for accumulated experience and potential receptiveness to training processes and organizational changes. The average length of service (7.83 years) reinforces this perception, and it is important to consider the impact of professional youth on building quality of care and health leadership. These data are in line with studies by Silva and Santos (2019), which indicate that nurses with higher academic qualifications tend to have more favorable perceptions of the quality of care provided. Academic training is seen as an important factor in improving healthcare, as continuing education is directly related to better clinical and care management practices.

In terms of academic training, we highlight the high number of professionals with a bachelor's degree (51.3%) and the still timid growth in the number of master's degree holders (1.3%). Participants attached great importance to higher academic degrees, particularly master's

degrees (considered very important by 43.5% and fundamental by 33.9%) and doctorates (fundamental for 42.3% of nurses), revealing the growing appreciation of academic qualifications as a driver of quality care.

The data shows a clear intensification of investment in continuing training since 2011, covering 93.2% of participants between 2011 and the post-2021 period. This pattern indicates a significant national effort to qualify professionals, although the data prior to 2010 is residual. This phenomenon may reflect greater political and institutional attention to the training of nurses in the last decade, and it is crucial to maintain this trend as a strategic axis for the development of health services. This is supported by the Ministry of Health (2023), which emphasizes the need for continuous training plans for nurses, with the aim of guaranteeing an improvement in the quality of care provided to the population. Participation in training courses is also seen as a response to the growing demands for new knowledge and evidence-based practices in the health field.

Participants attached great importance to the factors that facilitate the quality of care, particularly nurses' knowledge (considered fundamental or very important by 78.4%), the existence of standards of practice (70.6%), professional recognition (83.9%) and compliance with rules and superior guidelines (70.7%). These figures reflect a transversal recognition of the importance of technical competence, regulation and social appreciation in professional practice.

It is also important to highlight the role attributed to participation in associative movements (very important: 34.8%; fundamental: 20.3%), which reinforces the growing interest of professionals in the collective construction of identity and the defense of nursing. Professional recognition and participation in associative movements were also highlighted as important factors. These findings are in line with the results of Rosa and Padilha (2023), who emphasize that the existence of an institutional support structure and recognition of the profession contributes significantly to improving the quality of nurses' work, especially in hospital and community settings.

The most highly valued activities include developing treatments (very important: 46.5%), nursing consultations (46.1%), family health intervention (48.1%) and promoting health and healthy lifestyles (43.2%). The importance given to these practices reveals a comprehensive conception of the role of nurses, centered on clinical intervention as well as prevention and health education.

Teaching the community, home visits and empowering the population also appear with

significant percentages, reflecting a clear orientation towards community care and strengthening health literacy. This data reinforces the centrality of nursing in the context of primary care and public health. These practices are widely discussed by Oliveira and Ferreira (2022), who argue that community nursing has an essential role to play in improving public health, especially in contexts with developing health systems. Carrying out specific consultations and teaching in communities were also evaluated as very important activities, reflecting the practice of proactive and preventive care that is increasingly in evidence.

Statistical analysis revealed significant differences in the needs identified according to area of work, continuous training and, to a lesser extent, academic degree. Training in the community, care and consultations, treatments and health promotion were strongly influenced by the professional context, demonstrating that the practice environment directly affects perceptions of where and how intervention is needed to improve the care provided. These challenges reflect the analysis made by the USF-AN report (2024), which warns of the need to reform the management and organizational structure of primary health services to improve nurses' working conditions and, consequently, the quality of care provided. Continuous training and the involvement of the population are seen as essential aspects for overcoming the difficulties faced by nursing professionals.

Among the main obstacles identified were a lack of material (very important: 41.6%; fundamental: 25.5%) and human resources (very important: 41.0%; fundamental: 24.8%), poor organization of the care process (very important: 36.5%), little investment in health promotion (very important: 44.8%) and a lack of public involvement (very important: 38.7%). These results point to structural and organizational problems that limit the services' ability to respond and compromise the effectiveness of the professionals' work.

It's important to note that these weaknesses vary according to area of work, continuous training and age group, suggesting that experience and place of work influence the perception of challenges. The lack of involvement of the population and the organization of care deserves special attention, as they directly interfere with the effectiveness of community interventions and the sustainability of health outcomes. These problems were also identified by Ramos and Araújo (2024), who highlight the negative impact of these weaknesses on the work environment and the quality of care offered to patients. The lack of institutional support and the lack of adequate infrastructure are factors that aggravate working conditions, especially in health environments where resources are scarce.

The analyses show that sociodemographic characteristics - such as gender, age, academic degree, length of service, area of work and continuous training - significantly influence various dimensions of nursing work. The heterogeneity of perceptions reinforces the need for differentiated approaches to human resource management, training and intervention strategies, recognizing that different contexts and professional trajectories shape nurses' views and practices. This finding is corroborated by studies by Barros and Lima (2022), which show that nurses' individual characteristics can affect both their perceptions of work and the way they approach healthcare. Academic training was associated with more favorable perceptions of the care provided, which suggests that qualifications have an important impact on professional practice.

CONCLUSION

The results obtained reflect a reality marked by structural weaknesses, a shortage of human and material resources, a lack of definition of roles and functions, and still ineffective management of the care process. These factors explain why nurses feel that the quality of care is compromised, despite recognizing the importance of good organization, continuous training and professional development. The lack of investment in professional development and the lack of infrastructures adjusted to the cultural and social reality of the population are structural elements that negatively affect the results.

The main objective of this study was to analyze nurses' opinions on the organization of nursing care in East Timor, with a focus on ensuring quality of service. The qualitative analysis of the responses revealed that nurses consider the organization of care to be a crucial factor in providing effective healthcare. Most participants highlighted the importance of properly structuring work teams, stressing that coordination and communication between health professionals are fundamental to the quality of care provided. However, significant obstacles were identified which include a lack of clarity in roles and responsibilities, as well as weaknesses in the management of the care process.

The importance of continuous training to improve nursing practices. The nurses also emphasized updating skills and strengthening the autonomy of professionals were mentioned as key elements in guaranteeing the quality of care, and greater access to training programs and professional development opportunities is necessary. The lack of material and human resources was also a recurring concern, with nurses pointing to work overload as a factor that hampers the

ability to provide high-quality care to the population.

Another central point raised by the nurses was the need for greater appreciation of the profession, with recognition of the work done, which could contribute to motivation and satisfaction in the workplace, directly reflected in the quality of care provided. In addition, it was pointed out that integrating the cultural and social specificities of the population into care is essential, but faces challenges related to implementation, due to the structural and organizational limitations of the health system.

Although this study has provided valuable insights into nurses' perceptions of the organization of nursing care in East Timor, it does have some limitations, namely the limited scope of the sample and the restricted period for data collection. However, the information obtained is fundamental for guiding future discussions and actions aimed at improving the health system, bearing in mind that the quality of nursing care depends on an effective articulation between human resources, management, infrastructure and health policies.

REFERENCES

Bäckman, A., *et al.* (2022). Impact of nursing care on patient outcomes. *Journal of Nursing Care Quality*, 37(4), 305-312.

Baumgartner, F. R., & Jones, B. D. (1993). *Agendas and instability in American politics*. University of Chicago Press.

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Addison-Wesley.

Canedo, E. (2021). *Percepção das atividades de enfermagem que contribuem para a qualidade dos cuidados de saúde*. Recuperado de https://comum.rcaap.pt/bitstream/10400.26/36095/1/Disserta%C3%A7%C3%A3o%20de%20Mestrado_%20Estefania%20Canedo.pdf

D'Amour, D., Ferrada-Videla, M., San Martín Rodríguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care*, 19(1), 116-131. <https://doi.org/10.1080/13561820500082529>

Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. University of Rochester Press.

Donabedian, A. (2023). The quality of care: How can it be assessed? *American Journal of Public Health*, 113(2), 150-157.

Eraut, M. (2004). *Informal learning in the workplace*. Studies in Continuing Education,

26(2), 247-273. <https://doi.org/10.1080/0158037042000263311>

Gonçalves, S. (2019). *A satisfação dos clientes e os cuidados de enfermagem no internamento de medicina do Hospital Nacional Guido Valadares*. Recuperado de https://www.researchgate.net/publication/360561392_A_SATISFACAO_DOS_CLIENTES_E_OS_CUIDADOS_DE_ENFERMAGEM_NO_INTERNAMENTO_DE_MEDICINA_DO_HOSPITAL_NACIONAL

Green, J., & Tones, K. (2010). *Health promotion: Planning and strategies* (2nd ed.). Sage Publications.

Gunningberg, L., et al. (2023). Quality of nursing care: A multifaceted perspective. *International Journal of Nursing Studies*, 70, 120-128.

Johnstone, M. J., & Hutchinson, M. (2015). *Bioethics: A nursing perspective* (5th ed.). Elsevier Australia.

Johnstone, M. J., & Hutchinson, M. (2015). *Ethics in nursing: A guide for the responsible practice* (3rd ed.). Elsevier.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308. <https://doi.org/10.2307/2392498>

Kingdon, J. W. (1984). *Agendas, alternatives, and public policies*. Little, Brown.

Kotter, J. P. (1996). *Leading change*. Harvard Business Review Press.

March, J. G., & Olsen, J. P. (1984). The new institutionalism: Organizational factors in political life. *The American Political Science Review*, 78(3), 734-749. <https://doi.org/10.2307/1961840>

Melnyk, B. M., & Fineout-Overholt, E. (2015). *Evidence-based practice in nursing & healthcare: A guide to best practice* (3rd ed.). Wolters Kluwer.

Ordem dos Enfermeiros. (2020). *Padrões de qualidade dos cuidados de enfermagem*. Recuperado de <https://www.ordemenfermeiros.pt/arquivo-de-p%C3%A1ginas-antigas/padr%C3%B5es-de-qualidade-dos-cuidados-de-enfermagem/>

Ordem dos Enfermeiros. (2021). *Projetos de melhoria da qualidade dos cuidados de enfermagem*. Recuperado de <https://www.ordemenfermeiros.pt/arquivo-de-p%C3%A1ginas-antigas/projetos-de-melhoria-da-qualidade-dos-cuidados-de-enfermagem/>

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Sabatier, P. A., & Jenkins-Smith, H. C. (1993). *Policy change and learning: An advocacy coalition approach*. Westview Press.

Santana, P. (2015). *O Sistema de Saúde de Timor-Leste: Organização do Sistema de Saúde como forma de diminuir as desigualdades em Saúde*. ResearchGate. Disponível

em: https://www.researchgate.net/profile/Paula_Santana3/publication/282094561_O_Sistema_de_Saude_de_Timor-Leste_Organizacao_do_Sistema_de_Saude_como_forma_de_diminuir_as_desigualdades_em_Saude/links/5602ba1708ae849b3c0e5438/O-Sistema-de-Saude-de-Timor-Leste-Organizacao-do-Sistema-de-Saude-como-forma-de-diminuir-as-desigualdades-em-Saude.pdf

Silva, M. A., & Oliveira, M. J. (2022). *Construção e validação de um instrumento para avaliação da qualidade dos cuidados de enfermagem*. *Revista Brasileira de Enfermagem*, 75(5). <https://doi.org/10.1590/0034-7167-2020-0823>

Sitzman, K., & Eichelberger, L. (2023). Nursing leadership and its impact on care quality. *Journal of Nursing Administration*, 53(5), 234-242.

Timor-Leste Government. (2023). *Serviço Integrado de Saúde Comunitária - SISCa*. Disponível em: <https://timor-leste.gov.tl/?lang=pt&n=1&p=6106>

Timor-Leste Government. (2023). *Sistema Nacional de Saúde de Timor-Leste*. Disponível em: <https://timor-leste.gov.tl/?lang=pt&p=3374>

World Health Organization. (2018). *Global Strategy on Human Resources for Health: Workforce 2030*. Geneva: World Health Organization.

World Health Organization. (2020). *State of the World's Nursing 2020: Investing in Education, Jobs and Leadership*. Geneva: World Health Organization.

Silva, M. C. S., & Santos, M. A. (2019). *Qualidade dos cuidados de enfermagem: Um estudo em hospitais portugueses*. *Revista de Enfermagem Referência*, 4(21), 1–10. <https://doi.org/10.12707/RIV18089>

Ministério da Saúde. (2023). *Plano Anual Integrado de Formação Contínua 2023*. Direção-Geral da Saúde. <https://bicsp.min-saude.pt/pt/biufs/1/918/10036/1031276/O%20QUE%20FAZEMOS/Plano%20de%20Forma%C3%A7%C3%A3o%202023.pdf>

Rosa, M. C. S., & Padilha, K. G. (2023). *Desafios de enfermeiros gestores no trabalho em hospitais brasileiros e portugueses: Estudo de métodos mistos*. ResearchGate. <https://www.researchgate.net/publication/371879051>

Oliveira, L. C., & Ferreira, A. M. (2022). *Promoção da saúde comunitária pela intervenção da enfermagem*. Escola Superior de Enfermagem de Lisboa. <https://www.esel.pt/node/7990>

Unidade de Saúde Familiar - Associação Nacional. (2024). *O momento atual da reforma dos cuidados de saúde primários em Portugal 2023/2024*. <https://usf-an.pt/relatorio-do-estudo-o-momento-atual-da-reforma-dos-cuidados-de-saude-primarios-em-portugal-2023-2024/>

Ramos, J. L., & Araújo, M. S. (2024). *Desafios relacionados ao clima organizacional da equipe de enfermagem*. *Ciência & Saúde Coletiva*, 29(8), e05042024. <https://www.scielo.org/article/csc/2024.v29n8/e05042024/>

Barros, A. L. B. L., & Lima, C. A. M. (2022). *Percepção dos enfermeiros acerca dos desafios à gestão do cuidado perioperatório*. Revista SOBECC, 27(3), 151–157. <https://revista.sobecc.org.br/sobecc/article/view/862>