

THE SCIENTIFIC EVIDENCE ON NURSING ACTIONS FOR TRAVELERS' HEALTH

*AS EVIDÊNCIAS CIENTÍFICAS SOBRE AÇÕES DE ENFERMAGEM À SAÚDE DO
VIAJANTE*

*LA EVIDENCIA CIENTÍFICA SOBRE LAS ACCIONES DE ENFERMERÍA PARA LA
SALUD DE LOS VIAJEROS*

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ABSTRACT

Understand through the literature brings about the importance of nursing in health care for travelers. An integrative literature review was carried out in the PUBMED, Journal of Travel Medicine, MEDLINE, SciELO databases from 2012 to 2022 with the descriptors in Portuguese and English: Traveller's Health, Nursing Assistance, Tourism. A total of 22 articles were found according to inclusion and exclusion criteria, with only 03 Brazilian articles addressing the topic. More publications of Brazilian articles on the subject are needed and highlight the importance of nurses in this specialty.

Keywords: *Travelers' Health; Nursing; Tourism.*

RESUMO

Compreender, por meio da literatura, a importância da enfermagem na assistência à saúde do viajante. Foi realizada uma revisão integrativa de literatura nas bases de dados PUBMED, Journal of Travel Medicine, MEDLINE e SciELO, no período de 2012 a 2022, com os descritores em português e inglês: Saúde do Viajante, Assistência de Enfermagem, Turismo. Foram encontrados 22 artigos, conforme critérios de inclusão e exclusão, com apenas 03 artigos brasileiros abordando o tema. São necessárias mais publicações de artigos brasileiros sobre a temática e destacar a importância do enfermeiro nesta especialidade.


Descritores: *Saúde do Viajante; Educação em Enfermagem; Turismo.*

RESUMEN

Comprender a través de la literatura acerca de la importancia de la enfermería en el cuidado de la salud de los viajeros. Se realizó una revisión integrativa de la literatura en las bases de datos PUBMED, Journal of Travel Medicine, MEDLINE, SciELO de 2012 a 2022 con los descriptores en portugués e inglés: Traveller's Health, Nursing Assistance, Tourism. Se encontraron un total de 22 artículos de acuerdo con los criterios de inclusión y exclusión, siendo solo 03 artículos brasileños que abordan el tema. Se necesitan más publicaciones de artículos brasileños sobre el tema y resaltar la importancia de los enfermeros en esta especialidad.

Descriptorios: *Salud del Viajero; Enseñanza de Enfermería; Turismo.*

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INTRODUCTION

Traveler's health is a multifactorial theme in relation to public health, in the context of globalization, and is gaining a new look from authorities and health professionals, especially after the emergence of the COVID-19 pandemic, and its respective impacts on health determinants and conditions.

When a person travels and leaves their usual area, it is possible to be exposed to various risks of infectious diseases, as well as exposing other people to infections, in addition to aggravation of comorbidities, accidents, in all the places they go, from the moment they leave home until their return.¹

Recently, global health attention has turned to the *SARS-CoV-2* viral pandemic, which emerged in China and spread rapidly globally, by infected travelers crossing ports, airports, and borders without proper protection and prior care. The development of the vaccine on a global scale subsequently reduced the morbidity and mortality of this disease, 67.7% of the world's population received at least one dose of a COVID-19 vaccine by August 31, 2022.²

Considered as a multidisciplinary specialty, traveler's health integrates infectious diseases, immunization and public health. The professional who works in this area needs to be constantly updated, especially from global epidemiology to national and international health regulations.³

In this context, Travel health nursing is considered a specialized practice in promoting the well-being of travelers, at all stages of travel and in environments, mastering specific knowledge and skills.⁴

Nurses play a fundamental role in the development of bonds with users, being able to detect possible changes in health determinants and conditions, and intervene in the construction of comprehensive and humanized care at all levels of care, in the innovation of various health technologies, in permanent education and qualification of nursing care and the health team inserted in health units.⁵

Considering the increase in the displacement of people in the country, in 2019 alone, there were 6.353.141 international tourists and 45.853.332 national departures and arrivals⁶, the care and comprehensiveness of the health-tourism binomial are of great relevance for the economic and social development in a sustainable way for the country, in addition to providing physical, social and mental well-being.

In this sense, the following question was asked: What is the scientific evidence about nursing actions in the health care of travelers?

The choice of the theme arose from the reflections of the dynamics of health and tourism, in addition to highlighting the importance of nurses in this field of action, of planning and integration of care for the traveler, in order to reduce negative impacts on public health and the tourist phenomenon. The motivation also arose from the previous experiences of the author, who also has a degree in tourism, from questions about the integration of the two specialties.

Considering the above context, the impact on the production/organization of new knowledge is extremely relevant, in order to act in the elaboration of care protocols for traveling people, in addition to encouraging more nursing professionals in the Brazilian to carry out studies on the subject, in order to offer continuing education in the services,

act in the construction/implementation of integrated public policies and services in Primary Health Care, and ensure care in accordance with the expanded concept of health according to the World Health Organization (WHO).

The objective of this article is to identify the main scientific evidence about nursing actions and the role of nurses in the health care of travelers.

METHODS

This is an integrative review of the literature, with a qualitative approach, and a bibliographic survey was carried out as a method to understand what the literature brings about the importance of nursing in traveler's health care. Therefore, it is an investigation that, through the search in the literature, critical evaluation and the synthesis of evidence, can be transformed into the knowledge of the theme, identifying the weaknesses and starting from this construction, outline intervention plans in care and encourage new investigations in the area.⁷

The research and analysis were followed according to the following steps: identification of the theme and selection of the hypothesis or research question for the elaboration of the integrative review; establishment of criteria for inclusion and exclusion of studies or literature search; definition of the information to be extracted from the selected studies and categorization of the studies; evaluation of the studies included in the integrative review; interpretation of the results and presentation of the synthesis of knowledge.⁸

According to the PICO strategy, the investigation of this study was carried out and the following questions were obtained: "What is the scientific evidence about nursing actions in traveler's health care?" Each dimension of the strategy contributed to the definition of the inclusion and exclusion criteria: Population (P) – traveler; Intervention (I) – nursing care plan; Control (C) - does not apply and Results (O) - results to minimize the risk of illness as a result of travel.⁸

The descriptors and keywords related to the components of the PICO strategy were: "*Travelers' Health and nursing*"; "*Nursing and Travel Medicine*"; "*Travel Medicine and Nursing*" and "*Traveler's Health and Nursing Care*" and were stratified according to inclusion and exclusion criteria.

Table 01. Search Strategy

Database	Descriptors
PUBMED	<i>Travelers' Health and Nursing</i>
<i>Journal of Travel Medicine</i>	<i>Nursing and Travel Medicine</i>
MEDLINE	<i>Travel Medicine and Nursing</i>
SciELO	<i>Traveler's Health and Nursing Care</i>
LILACS	<i>Traveler's health</i>

Source: Authored by the authors. 2022.

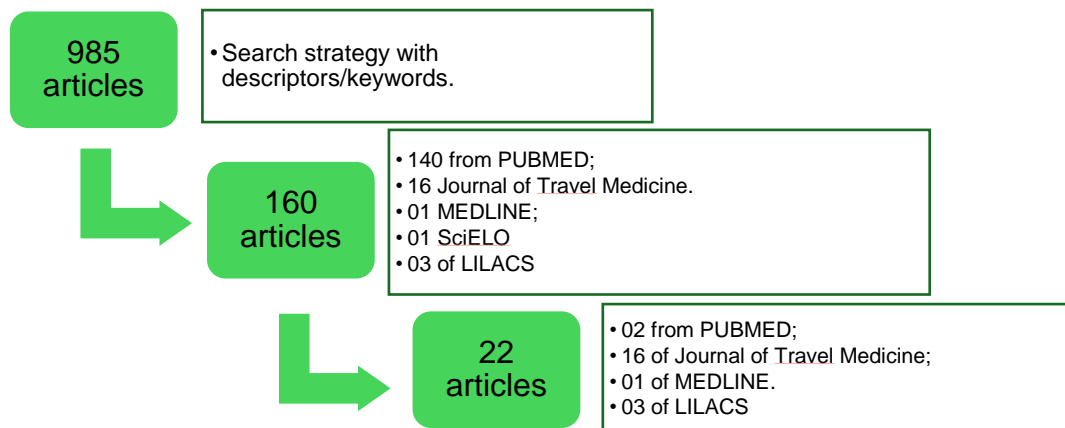
In this integrative review, the following inclusion criteria were defined: articles indexed in the *Pubmed*, *Journal of Travel Medicine*, *Medical Literature Analysis and*

Retrieval System Online (MEDLINE), *SciELO* databases, published from 2012 to 2022, full and free text, Portuguese language and English, with the descriptors and keywords: *traveler's health, nursing care, tourism*. Abstracts, articles in other languages, letters to the editor, case reports, case studies, duplicate articles, articles specifically aimed at physicians or other specialties, articles that did not present the binomial health and tourism in the context of health care were excluded.

From the data collection, through the titles, it was possible to locate 985 studies, which were submitted to the first stage of evaluation according to the inclusion and exclusion criteria mentioned above. At the end of the first stage, after reading the abstract, a sample of 160 studies was obtained, of which 140 (88%) were found in PUBMED, 16 (10%) in the *Journal of Travel Medicine*, 01 (0.62%) in *MEDLINE*, 03 in *LILACS* (1.9%) and none in *SciELO*. After reading the full text of these articles, a sample of 22 studies was obtained, of which 02 (09%) from *PUBMED*, 16 (73%) from *the Journal of Travel Medicine*, 03 (14%) from *LILACS* and 01 (05%) from *MEDLINE*.

Data analysis and interpretation were performed systematically by means of an Excel® data file categorized with study title, study identification, database, year of publication, methodological characteristics, main results and conclusions.

Figure 01. Data Collection Flow Chart



Source: Own authorship. 2022.

According to the categorization of the nature of the studies, quantitative (23%) and qualitative (50%) and quantitative-qualitative (27%) studies were observed, as well as the type of study, with emphasis on systematic and bibliographic reviews.

RESULTS

Travelers, with their mobility, exposure potential and possibility of being channels of disease transmission, wherever they go, are an important epidemiological population, therefore, there is a continuous need for global health surveillance and health professionals, such as nurses, need to understand and analyze these epidemiological characteristics to guide pre-travel recommendations and post-trip evaluations.⁹

According to the data analysis, it was possible to distribute the articles by year of publication in the period of ten years, with 01 article published in 2012, 03 in 2013, 02 in 2014, 03 in 2015, 02 in 2016, 06 in 2017, 02 in 2018, 01 in 2020 and 02 in 2021.

In 2019 and 2022, none of the inclusion criteria for this article were met. Regarding the origin of the publication, 03 Brazilian studies that met the criteria were identified and when correlating with the source of publication, most of the studies were published in the *Journal of Travel Medicine (JTM)*. Regarding the methodological approach, it was possible to identify 05 quantitative, 11 qualitative and 06 quantitative-qualitative studies.

Therefore, it is observed that it is essential to include publications in Brazilian magazines and newspapers on the theme with the connection with nursing and that the JTM is the database with the largest number of articles, being an international reference in publications on traveler's health.

Table 02. Distribution of articles according to year of publication

YEAR OF PUBLICATION	NUMBER OF ITEMS	YEAR OF PUBLICATION	NUMBER OF ITEMS
2012	01	2018	02
2013	03	2019	00
2014	02	2020	01
2015	03	2021	02
2016	02	2022	00
2017	06	Total	22

Source: Author. 2022.

According to the analysis of these studies, it was possible to categorize this article into two subtopics: health care in travelers and nursing care in health care in travelers, in order to contextualize the theme addressed.

DISCUSSION

HEALTH CARE FOR TRAVELERS

With the international flow of travelers, there is a greater proximity of people of different ethnicities, genders, in addition to people with morbidities and chronic diseases in general moving outside their usual zone, which can arise several risks and aggravations both for travelers and for the local community.

Traveler's Health analyzes a variety of factors related to the patient's history, the duration of the trip, destination, reason, vaccination, international policies, among others to provide a smooth and healthy trip. It addresses pre-travel health care, including counseling, administering immunizations, counseling and prescribing malaria chemoprophylaxis, teaching the management of diseases such as traveler's diarrhea, altitude sickness and recommendations for diving, accident prevention as well as best prevention methods.¹⁰

It is essential to provide explanatory information in advance about the risks of infection at the destination and during the trip and that can be produced in the event of an emergency, essentially in English or in the respective language of destination, so that the individual can be prepared for their trip consciously and in advance.¹¹

With the pandemic of the *SARS-CoV-2* virus, the dynamics of global public health have completely changed, with negative impacts. Most countries have adopted full or partial border closures in response to the virus, and positive effects have emerged for early border closures in conjunction with screening testing, traveler awareness, asymptomatic screening, and exit screening in the country of origin in addition to quarantine.¹²

In a systematic review, it was reported that the transmission of the new coronavirus was through contact between travelers and other individuals, mainly from the Asian region, being considered active agents in the transmission¹³. Recently, another viral outbreak called "*Monkeypox*" or Monkeypox has also emerged, and it still has no specific treatment and the international community is fully on alert, with more than 55 thousand confirmed cases in the world.¹⁴

In the traveler's health, it is also important to highlight the assistance to immunocompromised people. An investigation was carried out by telephone to the *National Travel Health Network and Centre (NaTHNaC)*, a British health service, and there is a national advice line for nurse-led health professionals. Of the 4,910 documented calls from the counseling line, 397 were related to concerns about immunocompromised travelers (8.1%). The authors also identified that 40% of the health professionals who sought the service had doubts about the use of inactive vaccines in immunocompromised patients.¹⁵

An important subject debated in travel health is casual sexual intercourse and the risks of acquiring Sexually Transmitted Infections (STIs). Studies identify that 1 in 5 travelers is likely to have a new sexual partner and with that the probability of acquiring an STI increases. There is a need for health professionals to provide sexual health education to these travelers.¹⁶

It is important to integrate the phenomenon of tourism for a better assessment of the traveler's health. The global economy and society have a great interest in travelers, another reason to add tourism and health. From the point of view of tourism, this traveler is a consumer of marketing, transportation, lodging, food and several other activities and in this tourism production chain it is essential to provide a good experience with adequate health planning.¹⁷

It is observed that knowledge of the theme and its main impacts on health and tourism is essential. In a mapping published in 2017 by the *Journal of Travel Medicine*, they report that of the 1,745 articles published, it was identified that traveler-acquired infectious diseases exceeded non-communicable diseases by seven times and represent a significant proportion of the morbidity associated with international travel.¹⁸

In this context, it is necessary that the health professional is trained to provide care to the traveler. Professionals are important in educating travelers about the risks of infection, as well as updating guidelines to enable the provision of adequate travel education and facilitating vaccination adherence, measures that would improve knowledge and potentially reduce the burden of illness among travelers.¹⁹

Information such as self-care during the trip, setting up a health kit, prior vaccination, providing guidance on the proper and legal transport of prescribed

medications, the importance of hydration, the use of comfortable clothes and mobilization at intervals during long trips is essential to highlight.²⁰

In order to carry out these guidelines, it is necessary to carry out a pre-trip consultation tailored to the traveler's profile. In a survey of French experts, it was concluded that advising travelers on strategies to reduce the health risk associated with travel and that it has a health responsibility, due to the risk that is exposed and ends up exposing people until their return home is extremely important.²¹ Travel health education encourages the adoption of good health practices through travellers' knowledge, attitudes and practices.²²

TRAVEL HEALTH NURSING CARE

As previously reported by the authors, the importance of pre-travel health care planning is perceived. For this planning to happen, it is essential for the individual traveler to look for a health unit and request a pre-trip consultation. This service can be provided by doctors, nurses, and pharmacists who are trained to meet this demand.

The pre-travel consultation can be a crucial moment to carry out health education with travelers, and aims to assess individual risk, guide anticipated health risks in addition to providing measures to manage these risks, such as: immunization, accident prevention guidelines, use of apps, educational booklets, prevention of Sexually Transmitted Infections (STIs), hydration and balanced diet, malaria chemoprophylaxis and other medications according to evaluation.⁹

In order to provide adequate nursing care to travelers, it is essential to follow the nursing process, which includes patient data collection, nursing diagnosis, planning, establishment of results, intervention, and continuous reassessment. The nursing diagnosis detects a state of risk, problems and willingness to promote health, therefore, it can be included in the evaluation of the patient-traveler.²³

In Brazil, there are still few Traveler Support Centers through the Unified Health System (SUS) and little information in the scientific literature. On the official website of the Ministry of Health, 07 Traveler's Health Support Centers are listed, 04 in São Paulo and 03 in Rio de Janeiro.

In the international literature, the importance of the role of nurses in this specialty can already be observed. The training of nurses in travel health is important, and it is an international appeal since in several places nurses have assumed a leadership and independent role in travel clinics or hospitals. There is a need to create a specialization in travel health nursing.¹⁷

Nurses have been asked to prepare travelers, but many are not trained to meet this demand. The volume of international travel today is not matched by an adequate number of well-trained professionals for traveler assistance.²⁴

In the Netherlands, since 1996, travel health nurses have been allowed to carry out the health consultation while travelling. They conducted a questionnaire and sent it to 475 nurses about their medication prescription competence and educational needs.²⁵ In a survey conducted in Canada to understand the services of travel clinics, it was evidenced that half of the respondents to the clinics were private and managed by a nurse or physician and a greater scope of work of nurses in Quebec.²⁶

In New Zealand, pre-travel orientation was provided to students in university clinics, and health professionals would have been qualified to meet the demand, including attending conferences, in addition to nurses working in the counseling clinic.²⁷

A survey was conducted with physicians and nurses who are members of the French Society of Travel Medicine and it was reported in the survey that 78.5% of the physicians and nurses interviewed consider it extremely important to discuss this topic and it was observed that professionals with training in education and health have an easier time investigating and analyzing aspects such as travelers' perception of the guidelines provided and the best way to absorb this information²⁸ tag.

Once again, the importance of training and assistance for nurses in the area is observed. There is a need for future travel medicine guidelines, conference content, and scholarly articles with an expanded focus, and a stronger scientific basis for disease risks among all global travelers is needed.²⁹

It is important to know that health surveillance is associated with travel and that barriers and benefits of preventive practices are the strongest predictors of health behaviors. Primary health care professionals can develop this role, mainly through continuing education and integration of policies, ensuring comprehensive care for this population³⁰.

CONCLUSION

In view of the view presented, it is observed that scientific evidence on the nursing actions for the health of travelers is still very scarce. There is a need for more Brazilian publications on traveler's health and nurses as authors, in the search of the database the scarcity of publications by nurses is notorious.

Encouraging the role of nurses in traveler's health care is extremely important for public and private health in order to reduce the introduction and reintroduction of various infections, reducing damage in relation to travel, preserving the individual's health for a smooth and safe trip.

It is also suggested that the health care of travelers in private clinics and in the Unified Health System (SUS) be implemented in the Brazilian nurses' agenda. Tourism in Brazil grows with each passing year and with this growth there is a need to take care of and maintain the assistance of these travelers to avoid mainly outbreaks and epidemics. In the State of Ceará, in the Northeast region of the country, there is also a need for qualification and training of professionals on the subject, especially in large tourist centers.

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