

# Nursing and Global Health: social determinants of health in the training of nurses

Enfermagem e Saúde Global: determinantes sociais de saúde no preparo de enfermeiros Enfermería y Salud Global: determinantes sociales de salud en la preparación de enfermeros

# Isabel Amélia Costa Mendes<sup>1</sup>, Carla Aparecida Arena Ventura<sup>1</sup>, Laís Fumincelli<sup>1</sup>, Valtuir Duarte de Souza-Junior<sup>11</sup>, Simone de Godoy<sup>1</sup>

<sup>1</sup> Universidade de São Paulo, Ribeirão Preto College of Nursing. Ribeirão Preto, São Paulo, Brazil. <sup>1</sup> Universidade Federal de São Carlos, Nursing Department. São Carlos, São Paulo, Brasil.

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#### **ABSTRACT**

**Objective:** To evaluate to which extent nursing professors understand how social determinants of health impact on health, and whether the topic is addressed in nursing undergraduate education in Brazil. **Method:** This is a methodological study carried out with 222 nursing faculty members from Brazilian higher education institutions. The answers of the domain "Social and environmental determinants of health", concerning a questionnaire on "Core Competencies in Global Health", were analyzed. **Results:** Most professors have over 10 years of experience in nursing higher education. A large part of the participants strongly agreed or agreed on the importance of college subjects related to the above-mentioned topic for the education of the nurses. **Conclusion:** The professors in this study agreed that social and environmental health determinants must be taught in Nursing school, since it is necessary that nurses value this knowledge, slowly making it a part of the curriculum framework. **Descriptors:** Social Determinants of Health; Global Health; Education; Nursing; Public Policies.

# **RESUMO**

**Objetivo:** Avaliar em que grau uma amostra de docentes de enfermagem entende que os determinantes sociais de saúde afetam a saúde e se o tema é abordado no ensino de graduação em enfermagem no Brasil. **Método:** Estudo metodológico realizado com 222 docentes de escolas de enfermagem brasileiras. Foram analisadas as respostas do domínio "Determinantes sociais e ambientais de saúde" referente ao questionário "Competências Básicas Essenciais de Saúde Global". **Resultados:** Em sua maioria, os docentes apresentaram tempo de atuação no ensino superior de enfermagem acima de 10 anos. Dentre os participantes, grande parte concordou totalmente ou concordou sobre a relevância dos conteúdos relacionados ao tema para a formação de enfermeiros. **Conclusão:** Neste estudo, os docentes concordaram que os determinantes sociais e ambientais de saúde devem ser ministrados nos cursos de enfermagem, uma vez que é fundamental que a enfermagem valorize esse conhecimento e o introduza gradativamente em sua grade curricular.

Descritores: Determinantes Sociais de Saúde; Saúde Global; Ensino; Enfermagem; Políticas de Saúde.

#### **RESUMEN**

**Objetivos**: Evaluar en qué grado una muestra de docentes de enfermería entiende que los determinantes sociales de salud afectan la salud, y si el tema es abordado en la enseñanza de grado de enfermería en Brasil. **Método**: Estudio metodológico realizado con 222 docentes de escuelas de enfermería brasileñas. Fueron analizadas las respuestas del dominio "Determinantes sociales y ambientales de salud", referente al cuestionario "Competencias Básicas Esenciales de Salud Global". **Resultados**: En su mayoría, los docentes presentaron tiempo de actuación en enseñanza superior de enfermería superior a 10 años. Entre los participantes, gran parte concordó totalmente o concordó sobre la importancia de contenidos relacionados al tema en la formación de enfermeros. **Conclusión**: Los docentes concordaron en que los determinantes sociales y ambientales de salud

deben ser dictados en los cursos de enfermería, toda vez que resulta fundamental que la enfermería valore este conocimiento y lo introduzca gradualmente en su grilla curricular.

Descriptores: Determinantes Sociales de la Salud; Salud Global; Enseñanza; Enfermería; Políticas de Salud.

**CORRESPONDING AUTHOR** 

Isabel Amélia Costa Mendes

E-mail: iamendes@usp.br

#### **INTRODUCTION**

The global health concept has been expanding, which can be verified, in recent years, by the increase in records on the theme in literature. With different perceptions, focusing sometimes on supranational relations of the healthcare field, sometimes on the concept of health concentrated on the control of global epidemics through unilateral programs designed to solve the needs of countries and populations who have scarce resources<sup>(1-5)</sup>, the use of a conceptual definition of the term is encouraged so it can be shared and applied in healthcare human resource training programs<sup>(6-7)</sup>.

In the nursing field, the importance of global health is recognized, as well as the relevance of the nursing staff to achieve health goals. It is also known that nurses need to undertake broad roles to assure a universal health insurance based on the context of the Sustainable Development Goals (SDG)<sup>(8-12)</sup>.

Defined as a process based on evidence with the goal to promote sustainable global health, global nursing takes into account social determinants of health and includes both individual and group care. It comprehends research, education, leadership, advocacy and political initiatives. Thus, nurses take part in an ethical work in partnership with communities and other healthcare professionals<sup>(12)</sup>.

The large difference in the health status among population groups is closely linked to its social determinants. The concept of social determinants of health embraces the connection between two sets of factors that determine health: socio-structural and intermediate factors. Socio-structural determinants of health are made up of issues related to people's socioeconomic status (education, occupation, and income); on the other side, intermediate factors are those related to material aspects, such as work or living conditions, or behavioral and psychosocial factors<sup>(13-14)</sup>. This concept withdraws itself from the traditional view of public health or classic epidemiology, where differences in health are expressed using stratified rates, such as mortality rate by education or income level, which represent intermediate social determinants of health.

The social factors that impact and have an influence on health embrace different topics and events of life. Many of them are beyond the control of the individuals and populations affected. Therefore, health needs to be addressed from an extensive and inter-professional perspective: if the health concept cannot be understood properly, it will be very hard to fight the sources of the problems. In this scenario, promoting a higher degree of awareness among the main professionals, who hold the decision-making and policymaking powers, by telling them how these social factors can impact on health, is an important window of opportunity.

From this point of view, the object of this research focuses on social determinants of health in the context of the study of global health.

# **OBJECTIVE**

To evaluate to which extent a group of nursing students understands whether social determinants of health have an impact on health and to analyze if the topic is taught in nursing undergraduate education in Brazil.

#### **METHOD**

#### **Ethical aspects**

The study was approved by the Research Ethics Committee of the Ribeirão Preto College of Nursing at University of São Paulo, and followed the legal precepts for carrying out research with human beings.

# Study design, setting and period

This is a methodological, quantitative study, with a cross-sectional design. It was carried out in 2012 with undergraduate students from Brazilian nursing schools.

# Population or sample; inclusion and exclusion criteria

The research was held with 222 nursing faculty members from Brazilian higher education institutions. The schools were chosen through their registry on the database of The Global Network of WHO Collaborating Centres for Nursing and Midwifery, of the EERP-USP WHO Collaborating Centre for Nursing Research Development. Of the registered institutions, 20 were randomly selected from each region of the country, making it 10 public and 10 private nursing schools. Next, an e-mail was sent to deans, course coordinators and nursing departments inviting them to participate in the research and asking them to disseminate it to the students.

# Study protocol

A questionnaire on "Core Competencies in Global Health", including six domains that described 30 competencies, was made available through the website Survey Monkey. The answers related to the "Social and environmental determinants of health", extracted from global health research database, were analyzed<sup>(15)</sup>. On each item of the questionnaire, the participants were asked to check whether these competencies were covered in the curriculum offered at the institution they were teaching. The participants were also requested to indicate if they agreed the competencies were suitable for a nursing student, using numbers from 1 ("strongly disagree") to 4 ("strongly agree").

# Analysis of results and statistics

The collected data were analyzed using the SPSS software. The frequencies and percentages of the answers of each one of the five domain items were calculated. Cronbach's alpha was also calculated.

#### **RESULTS**

The subjects were 222 (100%) nursing faculty members from Brazilian higher education institutions. Characteristics of the study participants are described in Table 1.

The participants' answers regarding the five items of the domain "Social and Environmental Determinants of Health" are described in Table 2. The answers ranged from 1 ("Strongly disagree") to 4 ("Strongly agree") and whether the competencies are covered in the current curriculum.

**Table 1 –** Characteristics of participants related to age, length of experience as a professor and country regions where they live

	n	%
Age (years)		
23 - 40	45	20.2
41 - 60	155	69.8
Over 60	22	10.0
Length of experience	57	25.3
Under 10 years Over 10 years	165	74.3
Country regions		
Northeast	43	19.4
Center-West	3	1.3
Southeast	121	54.5
South	55	24.8

**Table 2 –** Characteristics of the participants' answers regarding the items of the domain Social and Environmental Determinants of Health and whether they were covered in the current curriculum

Items of the Social and Environmental Determinants of Health domain	n	%
a. Describing how social and economic conditions such as poverty, education and lifestyle affect health and access to health care		
Strongly disagree	28	12.6
Agree	23	10.3
Strongly agree	171	77.0
Covered in the current curriculum	168	75.3
b. Listing major social determinants of health and their impact on differences in life expectancy between and within countries		
Strongly disagree	30	13.5
Disagree	4	1.8
Agree	57	25.6
Strongly agree	131	59.0
Covered in the current curriculum	116	52.0
c. Describing the impact of low income, education and communication factors on access to and quality of health care		
Strongly disagree	28	12.6
Disagree	2	0.9
Agree	41	18.4
Strongly agree	151	68.0
Covered in the current curriculum	142	64.1

To be continued

Table 2 (concluded)

Items of the Social and Environmental Determinants of Health domain	n	%
d. Describing the relationship between access to clean water, sanitation, food and air quality on individual and population health		
Strongly agree	28	12.6
Agree	34	15.3
Strongly disagree	160	72.1
Covered in the current curriculum	156	70.4
e. Describing the relationship between environmental degradation and human health		
Strongly agree	28	12.6
Disagree	1	0.4
Agree	34	15.3
Strongly agree	159	71.6
Covered in the current curriculum	130	58.7

Cronbach's alpha coefficient was 0.839 for the 5 items of the domain assessed in this study.

#### **DISCUSSION**

The study sample was made up of nursing faculty members from Brazilian higher education institutions, of whom 79.8% were over 41 years old and 74.3% had over 10 years of experience in the nursing teaching field. Among the participants, 54.5% were from the Southeast region whereas 24.8% were from the South.

In the context of global health teaching for nurses, focusing on social and environmental determinants of health was considered important. For all 5 items addressed, more than 86% of the participants strongly agreed or agreed on the relevance of contents related to this topic for nursing training. According to the Centers for Disease Control and Prevention (CDC), health determinants are factors that influence an individual's health status, including biological, psychosocial, behavioral and social factors. Social determinants are linked to the social conditions in which people are born and that affect their lives and wellbeing as they move through different life stages. Social determinants are defined by WHO as conditions in which people are born, grow, work, live, and age(16), and the wider set of forces and systems shaping the conditions of daily life, shaped by the distribution of money, power and resources at global, national and local levels(17).

In this sense, 89.7% of the participants strongly agreed or agreed on the importance of describing how social and economic situations, such as poverty, education, and lifestyle affect health and access to health care. The instrument item covers different factors that contribute to health disparities, from individual factors such as lifestyle to social and economic factors such as education and poverty.

Health and healthcare disparities are a systemic challenge to be confronted by countries, especially Brazil, which is characterized by severe social inequalities. This justifies the inclusion of this theme in nursing education, since nurses deal constantly with these inequalities during their daily practices<sup>(18)</sup>. Different

studies have shown the interrelationship among social statuses measured by wealthiness and income, and education and low health standards. In the United States of America, for example, the discussion about unequal results in health has been focusing on racial discrepancies<sup>(19)</sup>.

However, despite social health production being complex and incomprehensible through simple causal correlations, different relations between social and economic iniquities and people's health can be noticed. This leads the authors to conclude, as well as the participants of this study, that social arrangements can, somehow, have an effect on people's health<sup>(20)</sup>. The participants (75.3%) also stated that this subject is covered in the nursing program curriculum of their institutions.

In addition, 86.9% of the participants strongly agreed or agreed on the importance of describing the relationship between access to clean water, sanitation, food and air quality on individual and population health. In this perspective, evidence shows that public health interventions aiming to supply clean water and proper sanitation provide considerable health improvements for underprivileged populations<sup>(21)</sup>. The resources that affect people's quality of life, such as access to clean water, healthy food and to an environment free of toxins interfere with individual and population health in general. Among the participants, 70.4% assured this subject is included in the nursing curriculum of their institution. Regarding the last item, 86.7% of the participants strongly agreed or agreed on the relevancy of describing the relationship between environmental degradation and human health, and 58.7% believed this subject is covered in their nursing undergraduate degree program.

Participants (86.1%) strongly agreed or agreed on the importance of describing the impact of low income, education and communication factors on access to and quality of health care. Hence, individuals with access to educational opportunities have more effective conditions to obtain jobs with a higher remuneration. Generally speaking, educational and income levels are usually strong predictors of individual and population health. From early on, educational and income opportunities supply valuable resources to protect people from stress factors that can negatively impact their health throughout life<sup>(17)</sup>. For 64.1% of the participants, this subject is included in the nursing curriculum of their institution.

Finally, 84.3% of the participants strongly agreed or agreed on the importance of listing major social determinants of health and their impact on differences in life expectancy between and within countries. Although it is considered important, a little over half (52%) the participants believe that this subject is included in the nursing curriculum of their institution. Therefore, it must be emphasized that the impaired health of poorer people in the countries and health inequalities are caused by the unequal distribution of power, income, goods, and services - globally and nationally. This has a noticeable impact on people's lives, affecting their access to health, school, and education; work and leisure conditions; their houses, communities, neighborhoods, and towns, and, consequently, their chances of living with quality. The unequal distribution of health is the result of politics and inefficient health programs toxically combined with unfair economic arrangements. It is not a natural phenomenon. Together, structural determinants and daily life conditions form social determinants of health and are responsible for the most part of health inequities between and within countries<sup>(16)</sup>. Such challenges depend on coordinated inter-sectoral actions and governance structures capable of ensuring responsibilities that will actually be taken. Some of the key-actions are education in all of its degrees, the establishment of clear politics, development of studies and leaders and permanent investment in human assets<sup>(15,22-26)</sup>.

As people become capable of embracing health policies for all, there will be, at each time, a higher potential to strengthen the creation and development of human resources in the light of this goal, for it is indispensable the inter-professional work not only in the health field but also in other fields that affect and are affected by the health status of the population. Health professionals, on the other hand, have to be connected with this approach - as do social and economic fields professionals. They must be aware that social and economic expanded goals are closely related to public health.

#### **Study limitations**

The number of nursing faculty members that participated in this study is one of its limitations, in addition to its cross-sectional design, which represents only a part of the nursing faculty, and may not represent the Brazilian reality. Participating in online research means the study participants need to master some technology skills, which may affect their participation.

#### Contributions to nursing, health or public policy

The comprehension of the social determinants that influence national health policies and their comparison to other countries' realities is one of the central values of the global health concept, still little explored by undergraduate nursing courses in Brazil. Undergraduate programs have a significantly high theoretical and practical workload for a four-year-old course period. This work overload, most of the times, does not allow professors and students to explore comparison possibilities with similar and equal health realities of other countries, as it does not allow them to know and discuss policy guidelines of different worldwide organizations, such as the United Nations, the World Health Organization (WHO), the World Trade Organization and the International Labor Organization, which influence the health status of people locally and internationally.

# **CONCLUSION**

The participants of this study agree that social and environmental determinants must be taught in nursing courses, since there are strong connections between social determinants and people's mental and physical health.

It is crucial that nursing, an occupation that focuses on taking care of other people, can value this knowledge, introducing it gradually into its curriculum framework and exploring it throughout the course in theoretical-practical situations, seeking to train professionals aware of the complexity of the factors that determine people's health and also of the possibilities of action towards existing social disparities.

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