

Access this article online

Quick Response Code:



Website:

www.jehp.net

DOI:

10.4103/jehp.jehp_349_22

Social determinants of health: Awareness and attitude of students and professors in medical sciences universities

Farzaneh Mohammadi, Rahele Samouei¹

Abstract:

BACKGROUND: Considering the obvious and important role of social determinants of health on health outcomes and the mission of medical universities in explaining it, the aim of this study was to determine the awareness and attitude of the medical universities students and professors toward social determinants of health.

MATERIALS AND METHODS: This descriptive-survey study was conducted on the students and professors of Isfahan and Kashan Universities of Medical Sciences in fields related to social determinants of health and at different educational levels in the years 2020–2021. Data were collected by a researcher-made questionnaire of awareness and attitude. Data were reported by descriptive statistics using Statistical Package for Social Sciences (SPSS) 20.

RESULTS: The average percentage of correct answers to awareness questions was 44% by professors and 33.3% by students. The overall mean score of professors' attitude toward social determinants of health was 2.48 and students' attitudes were 2.65 out of 5. Professors' awareness about social determinants of health was more than students and their attitude was less positive than students.

CONCLUSION: Considering that a significant percentage of effective factors in health outcomes are social determinants of health and bearing in mind that universities, especially medical universities in providing healthcare, maintaining, improving, and promoting the health of the community, and also training the necessary human resources in the health sector to provide services play an important role, officials and decision-makers in the Ministry of Health and universities should decide to define this issue in the educational curriculum as well as holding related workshops.

Keywords:

Attitude, awareness, medical sciences universities, social determinants of health

Health Management and Economics Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, ¹Social Determinants of Health Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Dr. Rahele Samouei,
Social Determinants of Health Research Center,
Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: samouei@mail.mui.ac.ir

Received: 04-03-2022

Accepted: 03-08-2022

Published: 31-05-2023

Introduction

In recent decades, Social Determinants of Health (SDH), i.e., social, economic, and political conditions that affect individuals' health, have become increasingly important as a fundamental concept.^[1] The World Health Organization defines SDH as follows:

“The conditions in which people are born, grow, work, live, and age, and the wider set

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems.”^[2]

SDH includes several factors such as income, education, housing, food security, employment and job security, social security network, gender, race, early childhood factors, access to healthcare, indigenous status, and disability.^[3] According to research, up to 60% of preventable deaths

How to cite this article: Mohammadi F, Samouei R. Social determinants of health: Awareness and attitude of students and professors in medical sciences universities. *J Edu Health Promot* 2023;12:155.

are related to socioeconomic conditions^[4] and about 80% to 90% of the factors that contribute to the health consequences are SDH, whereas medical care covers only 10% to 20%.^[5] SDH helps to improve the health status of community healthcare systems by decreasing social classification and reducing exposure to health-related risk factors associated with lower socioeconomic status, reducing disease outcomes among disadvantaged individuals, and reducing the vulnerability of disadvantaged individuals against health-damaging factors.^[6] Thus, nowadays throughout the world, special attention is paid to SDH to improve the health of vulnerable populations in many health initiatives. Although healthcare providers are aware that SDH is a factor in the patients and the community health, the vast majority of them do not typically identify or address the social needs of their patients in practice. This occurs for a variety of reasons, such as providers' lack of understanding of the importance of social issues, the discomfort of discussing these issues, the limited time, and the lack of education or knowledge of community resources about SDH.^[7] Due to the importance of the subject and the evolution of the concept over the past years, SDH is considered a formal component of many undergraduate and graduate programs in population and public health (PPH) and related majors.^[1] By proper education and awareness, researchers, physicians, and even students in various fields of healthcare can identify SDH and the ways that affect health and examine it in health systems.^[5]

Previous studies have shown that describing the awareness level of citizens and decision-makers, action-based research and evidence, and cross-sectoral studies are the best options for examining SDH in the community.^[8] But few studies have been done to describe the knowledge and attitude. Lawless *et al.*^[9] examined the local government employee's awareness and perceptions toward social determinants of health (SDH) and interventions to reduce health inequalities in New South Wales through a pilot online survey. Ninety-six staff answered questions about sources of knowledge, familiarity with evidence, attitudes, and uses of ideas about social determinants of health. The results showed that 88.4% of the respondents were somewhat familiar with ideas about general health determinants and 90% agreed that the impact of policy actions on health determinants should be considered in government policy and planning. Original articles, government/professional reports, and professional communications have been introduced as important sources of knowledge about social determinants of health. Almujaideh *et al.*^[10] in a qualitative study through in-depth interviews with 17 primary care physicians, as well as a focus group with four social workers at King Khalid University Hospital in Saudi Arabia stated that action on SDH was hampered

due to lack of physician knowledge or training, lack of awareness of physician role in SDH management, and organizational barriers such as time constraints and patient referral/follow-up. More education on SDH in clinical care, organizational innovations to facilitate recognition of SDH during patient encounters, better interprofessional coordination, clarification of roles, and identification of opportunities are beneficial. These cases have been raised by the participants in this research to provide wider support for marginalized groups to improve living conditions and social care with more accountability. Breton^[11] introduces two main obstacles in France for the Health in All Policies (HiAP) project, one of which is the lack of awareness in policy-making networks about the social determinants of population health. Evci Kiraz *et al.*^[8] reported the local decision makers' awareness about social determinants of health in the Turkish province of Aydin using a questionnaire. The study found that supervisors were unaware of social determinants of health according to the World Health Organization classification and mayors were aware. However, both groups were classified as unaware due to their awareness of Marmot Review policy objectives.

Examining the existing studies, it was found that few studies have comprehensively assessed and described the awareness and attitude toward social factors that determine health, especially in universities and educational settings related to health. However, it should be noted that knowing the awareness and attitude level of individuals in the community about SDH is very important for decision-making and providing appropriate educational and policy solutions in this area. Since higher education is one of the most valuable resources available to the scientific community and is a key element of economic, social, political, and cultural development in any society, investing in this sector plays an important role in creating facilities and right action for national development in the country. Therefore, the existence of correct and appropriate awareness and attitude toward the social determinants of health among professors and students will be a means to make important changes in the society's attitude and knowledge in this area and promote health outcomes, which is necessary to identify awareness and the attitude of professors and students in health scope. The educational system and the important role that professors play in the educational process are a means to make important changes in students' awareness and attitude about SDH, and students by accepting various responsibilities in the country can be effective in the near future.

Therefore, on the one hand, considering the important role of universities in advancing the educational, social, cultural, economic, and political affairs of the country,

and on the other hand, considering the important and effective role of SDH and lack of knowledge about individuals and community's awareness and attitude, especially health area, this study was conducted to determine the awareness and attitudes of students and professors of disciplines related to the SDH in medical sciences universities.

Materials and Methods

Study design and setting

This study was a descriptive survey.

Study participants and sampling

This study was conducted on professors and students of Isfahan and Kashan Universities of Medical Sciences.

Data collection tool and technique

The disciplines of choice were those related to the SDH and in different educational levels. The SDH-related disciplines were selected based on the Amini-Rarani and Nosratabadi's study.^[12] The data collection tool was the researcher-made questionnaire that contained three sections. This questionnaire was obtained from the study of Mohammadi *et al.*^[13] and its validity and reliability were confirmed. The first section contained information about the participants' demographic variables. The second section consisted of multiple-choice questions related to measuring the awareness level about social determinants of health (18 questions), with only one correct answer. The third section included questions measuring attitudes toward social health determinants (15 questions with a 5-point Likert scale). Due to the coronavirus disease 2019 (COVID-19) pandemic, an electronic questionnaire was created and the survey was done virtually by informing the educational groups of the desired disciplines. After completion, the data were saved in Excel format and entered into Statistical Package for Social Sciences (SPSS) 20 software to analyze the data (calculation of frequency, percentage, mean, and standard deviation).

Ethical consideration

The results of the questionnaires were not exploited for personal goals, and the individual information of the respondents remained confidential.

Results

A total of 60% of the participated professors in the study were females, 82% were married, and 46% were assistant professors with an average of 14 years of work experience. Furthermore, 80.3% of students who had participated in the study were females and 85.2% were single with a mean age of 22.5 years. The results

of professors and students awareness about social determinants of health are presented in Table 1.

According to the results of Table 1, a higher percentage of professors (72%) and students (53.6%) answered question 6 correctly, a lower percentage of professors (18%) answered questions 7 and 8 correctly, and a lower percentage of students (21/5%) answered question 11 correctly.

The average percentage of correct answers of professors and students to awareness questions about social determinants of health was 44% and 33.3%, respectively.

The results of the professors and students' average attitudes about social determinants of health are presented in Table 2.

According to Table 2, the highest average of professors' agreement (3.2) with question 1 was "the role of social factors in the health dimensions has been given too much importance" and highest students' agreement with question 3: "Creating living conditions in a normal society is a treatment necessity for most people with mental illness" In general, the overall mean score of professors and students' attitude toward social factors affecting health were 2.48 and 2.65, respectively.

Discussion

In this study, the professors and students' awareness and attitude of Isfahan and Kashan Universities of Medical Sciences toward the social determinants of health were determined. In terms of awareness, the results showed that professors' awareness of social determinants of health was higher than students. However, the awareness of professors and students was both below 50%. In the attitude section, students had a more positive attitude than professors about social determinants of health. Low awareness of professors and students in this study was consistent with the results of the study by Almujaideh *et al.*^[10] who suggested physicians' lack of knowledge or training in the SDH area, the study by Evcir Kiraz *et al.*^[8] that reported lack of awareness of local decision makers in the province Aydin reported Turkey in relation to SDH and the Lawless *et al.*'s^[9] study, which found that respondents were somewhat familiar with ideas about general health determinants. The results of this study are also consistent with the findings of Breton's^[11] study, which suggested a lack of awareness in policy-making networks about social determinants of health.

The existence of such results in the academic community should be examined more carefully. Because, in recent years, health viewpoints have gained a broader perspective and more attention has been paid to the

Table 1: Percentage of correct answers to awareness questions about social determinants of health

Item	Awareness questions about SDH	Professors Frequency (percentage)	Students Frequency (percentage)
1	The phrase “lower social status is associated with worse health status in individuals” includes which following key concepts?	18 (36)	44 (24.9)
2	What is the lifespan and health status of women (in terms of disease) compared with men during life?	29 (58)	95 (53.1)
3	Which of the following concepts is most relevant to the main criterion for “judging the unfairness of a situation?”	19 (38)	54 (30.3)
4	What exactly does “living in a poorer situation than the people of the world” mean?	19 (38)	60 (33.5)
5	Which of the following is not part of the three basic principles of primary healthcare?	20 (40)	59 (33)
6	Among the following barriers to access mental healthcare which one is not related to the patient him/herself?	36 (72)	96 (53.6)
7	Which of the following concepts does this sentence, “people with lower mental health are more likely to fall into poverty?” refer to?	9 (18)	54 (30.3)
8	Which of the following is more involved in shaping the social determinants of health?	9 (18)	42 (23.5)
9	Which of the following does not work in favor of men in determining the role of gender in health?	23 (46)	51 (28.5)
10	Which of the following reasons which cause a difference between individuals is an example of injustice in health?	15 (30)	45 (25.4)
11	From a sociological point of view, how can high income inequality in societies increase violence in the first place?	19 (38)	38 (21.5)
12	Which one can be the source and basis of individuals social classification in society?	26 (52)	58 (33)
13	Which option gives a more precise definition: Spiritual health means the impact of spirituality on .	21 (42)	61 (34.1)
14	Marginalization in the first step is the result of which of the following?	33 (66)	62 (35.4)
15	The difference between social groups is not considered injustice if it is .	34 (68)	62 (35.6)
16	By what mechanism is food insecurity transmitted through generation?	18 (36)	51 (28.7)
17	What is the most important social concern in designing residential areas?	21 (42)	64 (36.4)
18	In the ecological approach, which of the following is an effective priority in maintaining the health of the social environment?	27 (54)	69 (38.5)
Average percentage of correct answers		(44)	(33.29)

Table 2: Determining the attitude of professors and students about social determinants of health

Item	Attitude questions about SDH	Professors mean±standard deviation	Students mean±standard deviation
1	The role of social factors in the health dimensions has been given too much importance	3.20±0.88	2.69±0.98
2	Given less control over social factors, policymakers must think of other ways to promote health.	2.30±1.05	2.12±1.02
3	Creating living conditions in a normal society is a treatment necessity for most people with mental illness.	1.74±0.92	3.26±0.76
4	Human has the right to change the environment according to his/her needs.	3.04±1.08	2.75±1.07
5	Improving the effects of social factors on health is the responsibility of the government, not the people.	2.54±1.05	2.39±0.99
6	Sensitivity to environmental problems such as air, water and soil is more worrying than being beneficial.	2.60±0.99	2.40±1.06
7	Students should receive formal SDH training in their curriculum.	1.80±0.96	3.21±0.94
8	Due to individual and group differences, equality of health services in society is not possible.	2.52±0.99	2.63±1.01
9	Regarding physical diseases, the medical model is preferable to the social model.	2.66±1.002	2.39±0.93
10	Society must make changes in itself to improve the health and well-being of the people.	1.52±0.76	3.30±0.87
11	The nature of social life brings classification and inequality.	2.28±0.83	2.38±1.006
12	Women are weaker in society due to their greater vulnerability.	2.48±0.97	2.47±1.06
13	Social classifications that are accepted by the majority of society are fair.	2.64±0.94	2.54±0.96
14	Social factors in health are successful when developed countries develop an executive plan and make it available to other countries.	2.76±1.02	2.58±1.05
15	In educational discussions, it is more important to pay attention to the child’s individual behaviors than to her/him social environment.	2.96±0.85	2.64±0.92
Total		2.48±0.33	2.65±0.29

social components of health. In fact, in addition to the medical approach, attention to health as a social phenomenon is in the spotlight and it is stated that access to a healthy society requires sufficient attention to the social components of health. Therefore, although healthcare can lead to treatment and increase life expectancy, what is important for the population health are the social determinants of health, such as income, education, occupation, nutrition, and so on. These determinants, even more than factors such as biological factors, cause diseases and reduce the people health level in society, which, if ignored, will prevent the achievement of health goals and the establishment of justice in health.

In such an environment, the low level of awareness and lack of acceptable attitude in the academic community toward the social determinants of health, and especially in the country's medical universities, which are responsible for maintaining and promoting community health, is a matter for serious consideration. At the end of 2005, Iran was recognized as a partner country of the World Health Organization in the social determinants of health and justice in health, and the approach of social determinants of health has been as one of the important priorities of the Ministry of Health in the recent years and its inclusion in the policies and programs of medical universities has been emphasized. In this regard, low level of awareness and lack of acceptable attitude among professors toward the social determinants of health cannot be a good and appropriate environment for raising students' awareness and participation in universities. Given that one of the most important tasks of universities is education, there is a need to review and emphasize more on the social determinants of health.

Conclusion

Considering the important role of social determinants of health and the role of universities, especially medical universities in providing healthcare, maintaining, improving, and promoting the community health level as well as training the necessary human resources in the health sector such as physician and nurses and so on to provide services, it seems that officials and decision-makers in the Ministry of Health and universities should pay more attention to this issue in the educational curriculum and workshops.

The present study provides practical information and new and important insights into the social determinants of health for policy makers and planners and it can be considered as a vital first step in research related to social determinants of health and planning for the future.

Acknowledgments

We thank all the students and professors who participated in this study.

Financial support and sponsorship

This project was funded by the National Agency for Strategic Research in Medical Education. Tehran. Iran. Grant No. 960440.

Conflicts of interest

There are no conflicts of interest.

References

1. Lucyk K, McLaren L. Taking stock of the social determinants of health: A scoping review. *PLoS One* 2017;12:e0177306.
2. Nundy S, Kakar A, Bhutta ZA. Academic medicine and the social determinants of health. In: *How to Practice Academic Medicine and Publish from Developing Countries?* Singapore: Springer; 2022. p. 3-8.
3. Hunter K, Thomson, B. A scoping review of social determinants of health curricula in post-graduate medical education. *Can Med Educ J* 2019;10:e61-7.
4. Gard LA, Cooper AJ, Youmans Q, Didwania A, Persell SD, Jean-Jacques M, *et al.* Identifying and addressing social determinants of health in outpatient practice: Results of a program-wide survey of internal and family medicine residents. *BMC Med Educ* 2020;20:1-6.
5. Brown EA, White BM, Gregory A. Approaches to teaching social determinants of health to undergraduate health care students. *J Allied Health* 2021;50:e31-6.
6. Ferrer RL. Social determinants of health. In: *Chronic Illness Care*. Springer, Cham; 2018. p. 435-49.
7. Welch K, Robinson B, Martin ML, Salerno A, Harris D. Teaching the social determinants of health through medical legal partnerships: A systematic review. *BMC Med Educ* 2021;21:302.
8. Evcı Kiraz ED, Ergin F, Okur O, Saruhan G, Beser E. Local decision makers' awareness of the social determinants of health in Turkey: A cross-sectional study. *BMC Public Health* 2012;12:437.
9. Lawless A, Lane A, Lewis FA, Baum F, Harris P. Social determinants of health and local government: Understanding and uptake of ideas in two Australian states. *Aust N Z J Public Health* 2017;41:204-9.
10. Almujaideh B, Adams A, Alquaiz A, Van Gurp G, Schuster T, Andermann A. Exploring social determinants of health in a Saudi Arabian primary health care setting: The need for a multidisciplinary approach. *Int J Equity Health* 2022;21:24.
11. Breton E. A sophisticated architecture is indeed necessary for the implementation of health in all policies but not enough: Comment on "understanding the role of public administration in implementing action on the social determinants of health and health inequities". *Int J Health Policy Manag* 2016;5:383-5.
12. Amini-Rarani M, Nosratabadi M. Content analysis of the official curriculum of undergraduate degree in Iran's medical sciences universities from the perspective of social health: A qualitative study. *J Edu Health Promot* 2021;10:182.
13. Mohammadi F, Keyvanara M, Samouei R. Awareness and attitude of students and professors of medical sciences universities toward social determinants of health: Design and preliminary psychometrics of a questionnaire. *J Educ Health Promot* 2020;9:116.