

**Health students attitudes towards disability**

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**Abstract**

**Background:** Individuals with disabilities remain one of the most socially excluded segments of the population, constantly fighting for equal rights and social inclusion. Disability is not an easy subject for health professionals to deal with, in part because it crosses many professional and cultural boundaries.

**Aim:** To analyze and understand the various attitudes toward people with disabilities, amongst the final year medical, midwifery and nursing students and to compare the three health departments on their students’ attitudes.

**Methods:** A questionnaire-based electronic survey was sent to all medical, midwifery and nursing students registered at two universities in Athens, Greece (n=190). The time frame was decided to encompass a month window (from 2<sup>nd</sup> May to 2<sup>nd</sup> June 2021)

**Results:** The Nursing students in the study showed overall a better attitude towards disabled people. Our research mainly indicates the fact that in general, there is need to prioritize training in both theoretical and practical fields through alterations in all three university departments’ curricula.

**Conclusion:** Undergraduates Health Students (of Nursing, Midwifery and Medicine) generally present

a lack of awareness, familiarity and experience towards disabled people. A number of factors seemed to influence health professional's attitudes to people with a disability including their age, gender, nationality, education, years of experience, general knowledge regarding a disability and the level and nature of their training. This research clearly illustrates the importance of improving how universities' undergraduate curricula address disabilities in an effort to inspire upcoming health professionals.

**Keywords:** attitudes, curricula, disability, health students.

### **Introduction**

Disability is a phenomenon as old as the history of humanity. Attitude is defined as 'a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related' <sup>[1]</sup>.

Attitudes are learned dispositions directing feelings, thoughts and actions <sup>[2]</sup>. There is a burden shared between people with disabilities and the health professionals themselves. However, health experts deal with the social burden of responsibility and distress as a response to their patients' needs and treatment, which is simultaneously exacerbated by the immense and anxiety provoking workloads. Whilst on the other hand, an individual with a disability faces the burden of their own disability which condemns them emotionally, physically and socially on a daily basis. Disability is not an easy subject for health professionals to deal with, in part because it crosses many professional and cultural boundaries <sup>[3]</sup>.

Individuals with disabilities remain one of the most socially excluded segments of the population,

constantly fighting for equal rights and social inclusion. This significant societal doctrine points to a need to increase our understanding of such treatments amongst the senior health sciences students, to compare and analyze their perspectives and attitudes towards this marginalized group. Primarily, the meaning of a positive attitude towards people with disabilities refers to a belief that those with disability can be productive community members, can have their own interests and independence on their daily lives and also, lead a normal, equal and active life. On the other hand, negative attitudes towards individuals with disabilities consist of inappropriate behaviors, supporting negative expectations and overall, misconceptions and ignorance, which adversely may impede their social inclusion instigating the segregation or marginalization of this group. The negative attitudes not only have a detrimental damaging outgrowth in general, but also may adversely influence other students, compounding detrimental outcomes.

Our research encompasses the Department of Midwifery, the Department of Nursing and the Department of Medicine. The premier aim of the study is to analyze and understand the various attitudes toward people with disabilities, to compare the three departments and lastly, to suggest solutions that will overcome these communication barriers, between the individuals with disabilities and the health care providers. Developing an understanding of the attitudes that predominate in a community that will in turn, influence the actions of its members, is critical if we manage to bring about social change and evaluate the effectiveness of public policies in promoting an inclusive society <sup>[4,5]</sup>.

This paper discusses the literature reviewed, which formed the basis for the study and also consists of an anonymous questionnaire which consists of data on demographic variables, influencing the attitudes towards people with said disabilities. Furthermore, it includes a list of statements, describing how the participant feels when they come in contact with an individual with a disability to which statements they are required to answer how much they agree or disagree with them.

Relevant literature was identified through manual library searches plus exploration of the PubMed, Embase, Ovid and Scopus databases. Search terms were: (attitud\* or aware\* or behave\* or belief\* or bias\* or discriminat\* or emotion\* or experience\* or feeling\* or opinion\* or perception\* or perspective\* or prejudice\* or stereotyp\* or stigma\* or view\*) AND (health students\* or medical students\* or nursing students\* or midwifery students\*). It became evident that there had been a limited amount of research that involved health science students, their education and their attitudes towards disabled people.

Seminal contributions have been made by several healthcare researchers, some focusing on the impacts stemming from the ignorance of graduate healthcare students towards the disabled and others on how healthcare scientists manage the professional relationship between them and individuals with disabilities. A person's disability may be viewed as a negative trait by a health care professional. He/she may also feel that a person with a disability is not "normal" and requires further support. In either case, these attitudes or reactions can affect the quality of health care for the person with a disability<sup>[6]</sup>. Prior research suggests that the strongest influence on attitudes is that

of contact with disabled people. Attitudes have been shown to be influenced in a positive way by the frequency of contact and the nature of contact. It is not the contact per se, however, that engenders positive attitudes but the context in which contact takes place (i.e., in a social environment where professional status is not an issue and where there is valued social contact with friends, colleagues or family)<sup>[7]</sup>. Negative attitudes held by health care providers about patients with disabilities may affect the care that a patient receives<sup>[8]</sup>. A number of authors have recognized the background of the problem, which is the educational gap that characterizes the healthcare students' curriculum on disability. For instance, the conclusion of the original research made by ten Klooster<sup>[9]</sup>, indicates the fact that educational interventions aiming at improving attitudes towards people with disabilities should include focus on forms of contact beyond the context of formal care relationships. Although these attitudes and misconceptions are usually not overtly hostile, they may result in patients with disabilities not receiving appropriate treatment or the indicated preventive care<sup>[10]</sup>. Furthermore, several studies suggest that only if early contact is established with disabled patients, practical educational strategies are adopted. When the students are provided with information on attitudes about the disabled, then a social model of disability can be introduced<sup>[11]</sup>. Most early studies as well as current work focus most on the age group, type of school and prior education regarding the disabled and the condition of caregiving to disabled people, speculating that these are factors influencing nursing students' attitudes towards people with disabilities<sup>[12]</sup>.

## **Methodology**

Questionnaires are a valuable tool for health research. However, current scholars are tackling budget constraints, loss of funding opportunities and increase of research associated fees. We intended to explore alternative avenues taking advantage of the free Google docs software for questionnaire administration.

In this electronic survey, data collection instrument was dependent on the use of computer-based technology for completion. Subsequent to the literature review and gap identification, a set of research objectives were formulated to be taken up for investigation. A questionnaire was thus designed to capture the main attitudes towards individuals with disabilities using the format of a Google Forms survey. This research tool provides results to be analysed using quantitative methods since the answers are obtained through close-ended questions with multiple-choice answer options. Paper based questionnaire was programmed to allow a simple to read and complete push button format. A confidential log in system was developed that allowed secure data collection. No personal identifying information was collected. The responses were formatted so all questionnaire data could be copied to separate spreadsheets for subsequent data analysis.

A draft version of the survey was revised for precision and sensitivity by medical, midwifery and nursing educators, not participating in this study. Google docs can serve as an efficient and free platform to administer questionnaires to a certain population without sacrificing quality, security, and fidelity of data.

The survey was organised along two thematic blocks, the first one exploring the background and demographic outlook of the participants and the second one focusing on their general response when

encountering someone with a disability. The second section was composed of 20 multiple choice questions whilst offering responders the possibility to reflect and rank their response on a Likert -type scale. This method demands the level of agreement or disagreement to statements and was used as a means of encouraging further participation and making the questionnaire straightforward and exact/unbiased. Concerning the distribution of the survey, the Google Forms link was shared through social media and email to final year students of the Health Sciences which include the departments of Midwifery, Nursing and Medicine, of two large universities in Athens. This method would allow for insight into the universities' curriculum regarding disabilities in the specific departments, demonstrating how it might have shaped the individuals' response to this vulnerable group of people.

The time frame was decided to encompass a single month window (from 2<sup>nd</sup> May to 2<sup>nd</sup> June 2021) with the plan of Google forms. Considering the feasibility and theoretical sufficiency for the research, it was thought fit to aim for at least 100 surveyees from each department. For ethical reasons, the survey was attached to an email invitation describing the purpose of the study, an assurance of anonymity, and the contact details of one of the researchers. The invitation explained that completion of the questionnaire would be regarded as consent to participate and for anonymised data to be published. The participation of the students was entirely voluntary, after informing them about the objectives of the study and confirmation of the confidentiality of their personal data. Participants had the opportunity to leave from the study, at any time they wished. The Universities Ethics Committees

suggested that ethics permission was not required for this project. However, in the interests of ethical quality assurance, care was taken to provide appropriate written information so students could make an informed decision to participate or not.

In conclusion, the final number of the participants on the questionnaire was 230 individuals.

The inclusion criteria were: final year students of the Nursing Department, Medicine and Midwifery (University Level –Higher Education)

The exclusion criteria were: students who study at a different department from the mentioned above and freshmen (1<sup>st</sup> & 2<sup>nd</sup> year) students of Health Sciences.

From the total of 230 partakers 40 of them were rejected due to the exclusion criteria above. Thus, reducing our final total of participants to 190 people.

## Results/ Analysis

### A. Demographic variables

Overall, (exclusion criteria) 190 senior Health Science students participated in the study. The majority of them has disabled people in their families which means that there is already a kind of experience in regards of their behaviour towards them. (See Table 1).

	Male (N=17)	Female (N=173)	Overall (N=190)
<b>In which university do you study?</b>			
Department of Medicine	10 (58.8%)	26 (15.0%)	36 (18.9%)
Department of Midwifery	2 (11.8%)	102 (59.0%)	104 (54.7%)
Department of Nursing	5 (29.4%)	45 (26.0%)	50 (26.3%)
<b>Current semester?</b>			
7th-8th Semester	5 (29.4%)	101 (58.4%)	106 (55.8%)
Graduant	12 (70.6%)	72 (41.6%)	84 (44.2%)
<b>Age</b>			
21-24	14 (82.4%)	147 (85.0%)	161 (84.7%)
25-30	2 (11.8%)	20 (11.6%)	22 (11.6%)
Other	1 (5.9%)	6 (3.5%)	7 (3.7%)
<b>Nationality</b>			
Other	1 (5.9%)	14 (8.1%)	15 (7.9%)
Greek	16 (94.1%)	159 (91.9%)	175 (92.1%)
<b>Any kind of disability (you/close relative)?</b>			
No	1 (5.9%)	18 (10.4%)	19 (10.0%)
Yes	16 (94.1%)	155 (89.6%)	171 (90.0%)

Table 1: Demographic Variables

Furthermore, the last question regarding the demographic data of the questionnaire was ‘Have you been taught during the semesters of your university\academic year, a course related to the care of the disabled?’ and it had the most staggering result of the research. The outcome regarding the percentages was 77, 9% towards the answer ‘No’ while only the 22, 1% of the individuals that completed the questionnaire chose the answer ‘Yes’. This upshot indicates that the curricula of those in the Health Departments that participated in the research encapsulate limited knowledge on the care of disabled individuals. A percentage of 77, 9% undergraduate students may be characterized as nescient while also lacking education, cognizance and critical thinking skills necessary for the solicitude of the disabled. These future graduates will make up tomorrow’s health scientists and it’s inadmissible for them to be uninformed on the provision of the disabled. Comparing the three departments and the answers of the students representing them we can conclude that 50% of nursing students have been taught about the care of the disabled which is the higher percentage amongst the other two departments. Medicine students acquired the lowest percentage because only 10,6% of them has been taught any kind of course referring the needs of disabled people (Table 2)

	Department of Medicine (N=36)	Department of Midwifery (N=104)	Department of Nursing (N=50)	Overall (N=190)
<b>Taught about disabled needs</b>				
Yes	6 (16.7%)	11 (10.6%)	25 (50.0%)	42 (22.1%)
No	30 (83.3%)	93 (89.4%)	25 (50.0%)	148 (77.9%)

Table 2: ‘Have you been taught, during the semesters of your university a course related to the care of the disabled?’

### B. List of statements

The second thematic block of the questionnaire was a composition of 20 multiple choice questions which offered participants the opportunity to reflect and rank their response on a Likert -type scale.

The first averment which draws our attention and is worth analysing was the statement ‘I feel that I am ignorant towards individuals with disabilities. The result of this question acquired in total a percentage of 64,3% (adding all the “agreed” statements) to the fact that the students are ignorant towards individuals with disabilities which indicates once again the lack of specialised education focusing on side-lined groups and specifically the one that is being investigated. Finally, the lowest percentage was attributed to the answer ‘I strongly disagree’, that was 8,4% (Fig. 1).

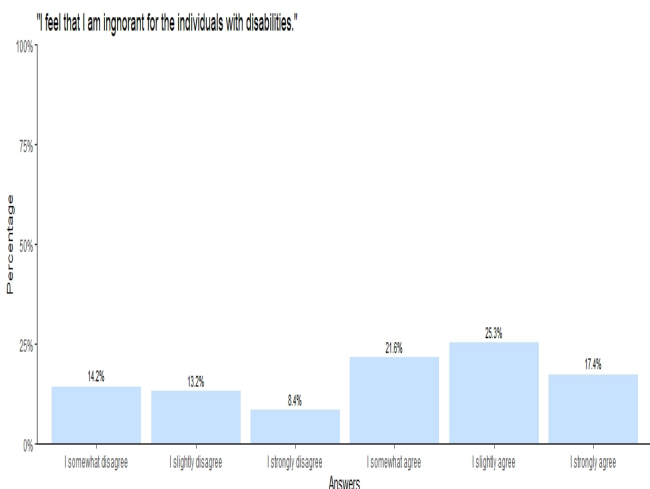


Fig. 1

Likewise, it is noteworthy to point out the upshot of the phrase ‘After frequent contact, I notice that I see the person and not the disability’. The results of this statement indicated that 93,1% selected answers which “agree” to the statement. Moreover, we had a percentage of 3,7% for the response ‘I slightly disagree’ and a percentage of 2,6% for the response ‘I somewhat disagree’. The option ‘I strongly disagree’

had a percentage of 0,5%, which was not taken into consideration since it was only one respondent out of the 230 individuals that completed the questionnaire. Due to this fact, we attribute that repeated acquaintance contributes to embrace finer compartment and attitudes towards disabled people (Fig. 2).

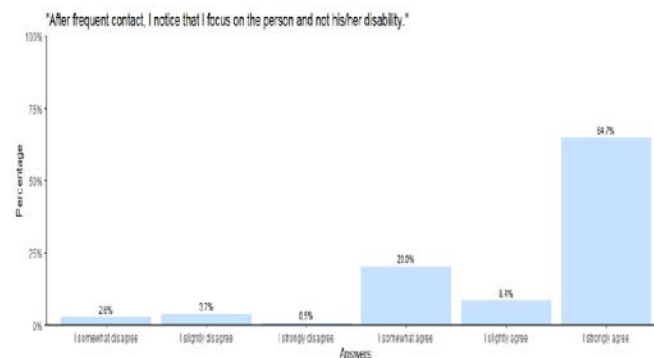


Fig. 2

Moreover, it is highly significant to mention the result of the statement ‘I try to act normal and ignore the disability’. There is a total percentage of 75,8% regarding the participants who agree in this phrase. Additionally, a total 24,2% answered that they disagree with the statement. The outcome after analyzing the results indicates that undergraduates struggle to behave regularly and are not capable of acting and interacting instinctively. This demeanor intimates that the last year students are not feeling reposeful towards the people with disabilities (Fig. 3).

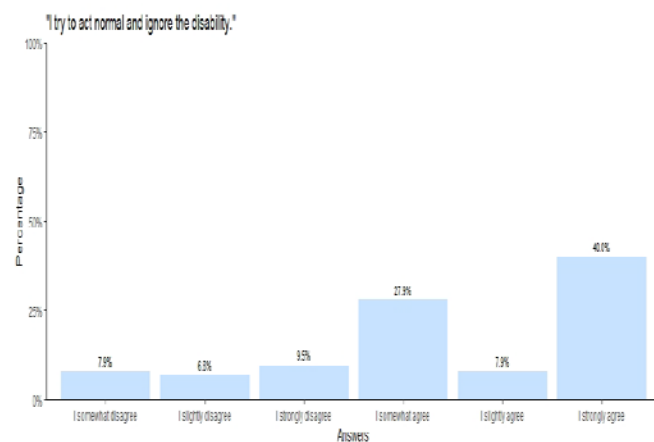


Fig. 3

Last in order, but equally important was the statement 'I admire their ability to get by'. The percentages on this testimony were 77,89% corresponding to the option 'I strongly agree', 16,84% corresponding to the assertion 'I somewhat agree', 2,83% corresponding to the option 'I slightly agree' and ultimately, 2,11% corresponding to the option 'I somewhat disagree'. The alternative options 'I strongly disagree' and 'I slightly disagree' were not subsumed in the bar plot for the reason that their proportions were less than 1%. The layout of this bar graph demonstrates with certitude that the majority of the undergraduates marvel the ability of the disabled individuals to cope with their day to day limitations. There is no doubt that people with disabilities have equal rights and opportunities compared to non-disabled individuals, but we can admit that the difficulties that epitomize their daily routines do not exist/ are not prevalent in everyone's lives (Fig. 4).

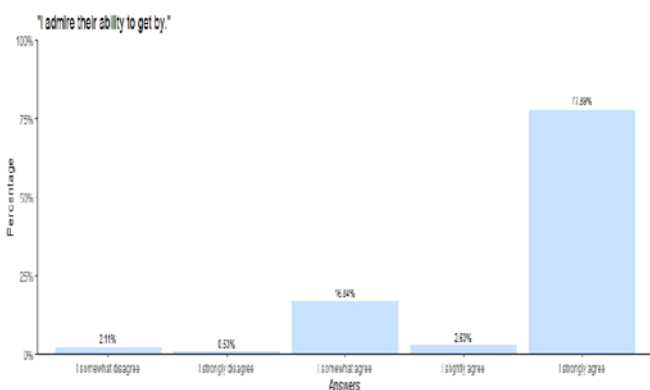


Fig. 4

## Discussion

Changes in Nursing's departmental curriculum have not demonstrated significant changes with regards to the attitudes of its students towards people with disabilities [8]. As we have also concluded above, the Nursing Department students have overall a better attitude towards disabled people. It has been also found

from other researchers that additional training is required both in terms of theory as well as practice in order to improve the attitudes of medical students, as more research is needed in this discipline [13,14,15]. Some of the factors associated with providers' attitudes toward patients with physical disabilities are potentially modifiable (e.g., experience) and could be the target of educational interventions to ameliorate this fear and facilitate higher quality care [16]. Educational curricula must address the issue of students' attitudes and, in particular, the facilitation of valued social role contact with persons with disabilities [17,18]. Same findings coincide with the conclusions drawn from our own research as Medical students acquire the lowest percentages [19,20]. There is lack of theoretical knowledge in this specific issue (89,4% have never been taught about disabled needs) and they also find it more difficult than the other students when they have to cooperate with this marginalized group. Never, in the past has there been research emphasizing to the Midwifery students conducted with regards to the study of the attitudes and perspectives of students in relation to people with any kind of disability. In our research, the Midwifery Department had the highest percentage (83,7%) in the answer "I strongly agree" of the question "I admire their ability to get by", illustrating an increased sense of empathy for those following this professional orientation. Finally, the same department had the highest percentage (18,3%) in the answer, "I strongly agree" to the question "I know the problems that people with disabilities face", which implies that the students in the Midwifery Department have the greatest understanding of the daily hardship and difficulties faced by people with disabilities.

Attitudes are an element of human behavior. Health professionals should have a global perception of disability.

They must provide treatment to people with disability and care for them, but they also should accept them with no judgments or discrimination [20]. Overall, our research mainly indicates the fact that in general, there is need to prioritize training in both theoretical and practical fields through alterations in the curriculum. There is great need for improvement when it comes to the attitudes of students towards disabled people in Greece, as their perceived ignorance can lead to uncertainty that may, in turn, impact their behavior. Attitudes towards disability of health students at universities ought to be positive, since they will be health professionals in the future.

### **Conclusion**

The study demonstrates strong reliability and validity prospects due to its wide empirical reach in terms of the quantity of participants as well as the authenticity and legitimacy of the research tools used (questionnaire) through the use of contemporary and advanced research mechanisms. This inquiry aimed to identify the perspectives and attitudes of final year health scientists towards the sidelined group of disabled individuals. Precisely, a number of factors seemed to influence health students' attitudes towards people with a disability including their age, gender, nationality, education, years of experience, general knowledge regarding a disability and the level and nature of their training. Based on a quantitative analysis of the research's questionnaire, it can be concluded that undergraduates in the Health Science departments (of Nursing, Midwifery and Medicine) generally

present a lack of awareness, familiarity and experience towards disabled people. Based on this conclusion, this research clearly illustrates the importance of improving how medical education curricula address disabilities in an effort to inspire upcoming health professionals. It is conjectured that a curriculum that would effectively illustrate a more in-depth insight to the grievances resulting from having a physical or intellectual disability, would allow students to assist and care for patients with disabilities thus fostering appropriate provider attitudes.

Overall, efforts must be made to improve healthier/potent attitudes through changes in the medical department's curriculum.

Attitudes and beliefs are present in everyone. These can be formed from a number of sources and can impact how people interact with each other.

Attitudes towards disability could influence behaviors, social interactions and inclusion of people with disabilities. Researchers have demonstrated that contact experiences and educational trainings improve positive attitudes towards disability and enhance the representation of the disabled person.

A disability awareness class might have an impact on university students' attitudes. Such classes can be offered to fulfill requirements towards students in particular majors, such as allied health professions. Universities and departments should consider offering these classes as credit towards a humanities course for basic university requirements. This would encourage more students, not just those interested in working or caring for people with disabilities and relate major fields, to take the class. This possibly will help to further promote positive attitudes within the university



community and create an environment that is not restricted, due to attitudes. The disability awareness class, could have a positive and powerful impact on the student body, if offered to a large scale of university students.

By implementing positive attitudes towards disabilities, we are not concentrating on what a disabled cannot do, but how we can help them achieve what they may lack in doing by themselves. By meeting their needs, we recognize and support them rather than singling out as special needs.

Other concepts consist of providing clinical and nonclinical community experiences, especially ones encompassing around positive role models. Furthermore, active learning using role-playing may also prove to be a beneficial tactic. There exists both a research and knowledge gap due a wider lack of empirical study on this issue both from a theoretical perspective but also from a methodological approach. Thus, this field of research needs further study to present a more comprehensive knowledge of the attitudes towards disabled people as a whole.

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