INTRODUCTION

The concept of care has been developed through the centuries [1, 2]. The literature on evolutionary approaches in health has articulated the development of 'care giving' and 'care eliciting' as critical processes in our advancement as a species [3]. As long as care is seen as something that is peculiar to the medical sciences its meaning and status for physicians and nurses differs. Caring is often seen as integral to women, and for years justified treating care as an attribute of nursing, not medicine [4, 5, 6]. However, some theorists believe that care is unique in nursing but not unique to nursing [7]. Yet, in the opinion of a number of theorists, care is an integral part of all health care. It is not possible to cure someone if one does not also care for him or her at the same time [4, 5, 8, 9, 10, 11].

Linguistically, care comes from the Latin word cūra. [14] Čūrātiō means attentiveness, caring, curing [12]. In essence, care is related to cure, but has a much wider meaning as it includes caring interventions. [13] The division of care giving and 'care eliciting' indicates that care can mean: looking after someone or something, or alternatively, the active seeking for someone’s service or favours. This paper will focus on the delivery of care giving in health care as a primary interest of healthcare providers as their ability to provide high quality care. Care giving is related to a state of mind of an individual concerned about someone, or being interested in another persons’ situation. This dimension of care might be described as ‘emotional care’ (to care about). Care giving is also characterised as a practical or technical activity. This dimension of care (to care for) needs the use of skills and activities directed to an object of care [4, 8, 15, 16, 17]. Emotional care can be seen as the motivation for practical or technical care, and in this sense both dimensions of care are considered as integral. Emotional care is also carried out without any technical activity and is understood as the space in which two human beings can share their feelings. In this space, nurses and physicians might try to understand the loneliness, pain or anxiety of patients and stay with them, listening and talking with them. This perspective is related to Norse roots of care where we can find the word kara, which means sorrow, lament, to cry out with, reach out [18].

Care can be seen as an essential phenomenon for all human beings. For Heidegger, care (Sorge) was a different name for...
human existence [19]. In this sense, care has an ontological meaning; it is not care about an individual in need. In medical practice, intentional care is needed, meaning care with the intention of helping someone with whom we are in relation. Heidegger’s account of care may be of some importance to medical practice, as it makes intentional care (so-called ‘proper care’) possible. We should know as much as we can about the existence of patients to care for them intentionally [20, 21]. Inspired by Heidegger’s philosophy, Nouwen underlined that care in its basic (Norse) meaning signifies that we do not have to fight back our tears but use them [18]. By sharing experiences of pain, suffering, sadness or loneliness we show real care, different from typical medical care, which is connected with the power to change the pain and suffering. This insight may be important for health care workers, especially in those care situations where we care but are not in a position to change the suffering. The only activity left in such situations is to join in the emotions and try to share them by being present.

Szewczyk’s conception of care [3, 22, 23] refers to the philosophical assumptions of Lévinas [24, 25] and Ramsey [26] and describes care as the intrinsic goodness of medicine (nursing), and defines it as a set of basic virtues of a doctor (nurse) such as caritas, compassion, trust and competence. Carrying out care understood in this way constitutes ‘more difficult care’, often exemplified by the problem of dividing care equally between patients.

A set of categories describing care in nursing was outlined by Roach [27]. Her ‘Five Cs’ show that it is difficult to talk about care other than in concepts such as compassion, competence, confidence, conscience, and commitment. The commitment is the element that differs between Roach’s and Szewczyk’s theories. Roach suggested a need to get involved in the process of caring while Szewczyk rationalised care by using justice [3, 23]. Mayeroff [28] seems to fall somewhere between these two sets of accounts by using eight categories that are indispensable to the realisation of care: knowledge, alternating rhythms, patience, honesty, trust, humility, hope and courage.

Pellegrino [8] claims that at least four meanings of ‘care’ exist that might be discussed in medical practice:

1) compassion, starts with sharing the experience of illness and pain or simply being moved by the serious condition of another person.

2) ‘Doing for others’ what they cannot do for themselves, and assisting people who have been limited by sickness in their everyday life activities. This type of care is particularly noticeable in nurses’ work.

3) Care is related to the medical problems experienced by patients. This includes the invitation to a patient to transfer his or her anxiety to a physician. The physician in turn gives a guarantee that knowledge and skills will be directed towards a patient’s problem, indicating that a patient’s anxiety needs specialised care.

4) ‘To take care’ combines diligent and perfect fulfillment of all needed procedures while caring. When these four meanings are carried out together there is ‘integral care.’

From the patients’ perspective, the physicians’ interpersonal skills, such as empathy, communication, trust, humanity and competence, are the most important in medical practice [29, 30, 31]. According to Larson et al [32, p.1105] ‘empathy (…) is not an attribute limited to those who perform direct day-to-day care, such as nurses; it also includes, and in many ways more importantly, those who diagnose and treat’.

Emotional care understood, e.g. as empathy, is associated with ‘emotional labour,’ which indicates emotional engagement with work with patients, developing close interpersonal relationships with them [33, 34]. Despite the fact that emotional engagement is more often associated with nurses’ work, it also plays a vital role in a physicians’ work [32]. The literature describes the benefits and costs of emotional labour in the work of health care professionals, such as deep satisfaction from interactions with patients and individual development. The costs of emotional labour are well recognized as the risk of burnout [32, 34]. Some authors see a possibility of avoiding burnout through an ability to develop so-called ‘distance care’ during professional education and practice [35].

MATERIAL AND METHOD

Objective. The aim of this research was to learn how both nursing and medical students understand and define ‘care’ and how their definition and practice of care giving differ.

Study design. The study was conducted among first and final year students of nursing (first cycle) and first, second, and later year students of medicine during the academic year 2008–2009. These students’ groups were chosen for several reasons: firstly, because they will be the future care professionals and it is important to know how they understand and practice care; secondly, a review of published data bases revealed little research about care giving in groups of medical students or physicians; thirdly, comparing definitions of care giving between these two groups may be important in the design of future teaching programmes; and lastly, the available literature suggests the existence of a ‘cure’–‘care’ division (“doctors cure and nurses care”) [4, 5] and it was considered important to examine this further.

Medical education in Poland – for physicians and nurses – is university-based and coordinated by the Minister of Health. The educational system for physicians mandates a one-cycle Master’s studies (6-year) which leads to the degree of Doctor of Medicine. In accordance with the Bologna Process and EU Directives, education for nurses is offered in a two-cycle system. The completion of the first cycle (3-year) leads to a Bachelor’s Degree in Nursing, and after this level of education it is possible to get the professional license and practice nursing. Nurses can also opt for 2 additional years of education to acquire the Master’s degree in Nursing.

Participants and their recruitment. A total of 140 questionnaires were distributed, 35 for each of four students’ groups: (group N1) first year nursing students; (group N2) last year nursing students; (group M1) first and second year medical students, and (group M2) later year medical students. All students who took part were approached and asked at the end of lectures if they were willing to take part in the study after explanations of what was involved. Students were fully informed about the purpose of the study and assured that the data would be kept confidential. Those who consented accepted a questionnaire to be completed at home and returned anonymously in an envelope to the first author.
Questionnaire development

The questionnaire was developed using the framework used by Wilkes and Wallis' [36, 37] and consisted of three open questions:

1. What does caring mean to you?
2. Describe an incident in which you have cared for someone (for first and second year students only, i.e. before going into clinical practice).
3. Describe an incident during your last practicum in which you perceived you were caring for a patient (for third year students or higher, after first practicum).

The rationale for a questionnaire-based approach as the most appropriate means of inquiry was based on a recognition that:

1) it enabled us to gather material from a large group of students to obtain objective data;
2) because respondents were our students and a questionnaire gave them anonymity and the possibility to answer more honestly.

Process of analysis

Analysis of the students’ answers was carried out using Colaizzi’s phenomenological descriptive methodology [38]. The process for completing this involved reading all the students’ responses to gain a general overview and underlining what appeared to be significant statements. The research team then read the highlighted statements, looking for their meaning. During this process, the analysts colour coded statements which appeared to reflect the same meaning. This enabled the next process of collating a larger number of statements into clusters which reflected on the emerging key themes. The final stage was to examine the material again to ensure that the team felt sure they were able to create an exhaustive description of the investigated phenomena.

RESULTS

The response rate from all groups was 75%, with 105 questionnaires returned. For the final analysis 102 questionnaires (100%) were used as three questionnaires were rejected because of lack of answers to some of the questions.

Socio-demographic characteristics of students

The group consisted of 102 people (100%) divided into four subgroups:

(N1) nursing students before their first practice (n=29);
(M1) medical students before their first practice (n=15);
(N2) nursing students after their first practice (n=27);
(M2) medical students after their first practice (n=31).

The average age of all the students was 21 (range 19–26). Students from group N1 entirely represented the first year of their nursing education; group M1 the first (n=12) and second (n=3) year of medical education; group N2 the third (last) year of nursing education; group M2 the third (n=8), fourth (n=13), fifth (n=6) and sixth (n=4) year of medical education. Among the respondents 75.5% (n=77) were women and 24.5% (n=25) men.

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<th>Table 1. Descriptions of main categories defining care</th>
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Question 1: Defining ‘care’

We were interested in understanding how the various groups in the study defined the concept of ‘care’. The set of categories and descriptions which emerged from the students’ descriptions is shown in Table 1.

There was no noticeable difference between nursing and medical students’ characteristics of care, regardless of their experience of formal healthcare. The N1, N2, M1 and M2 groups provided data from which the research team identified two basic dimensions of care: emotional and practical. Compassion, communication, support and commitment were used by students as defining care, as well as describing its practice in everyday life and professional practice.
As noted earlier, the technical dimension of care can be characterised by competence, including the application of knowledge and skills as tools for care giving. The students’ statements described the actual care given using this practical dimension. They reported technical activities of care that family members or patients themselves find difficult to perform due to the challenges associated with the disease or disability. The earlier cited literature noted the category of compassion as an important element in the care giving process, exemplified by the emotional involvement when helping someone. Both students’ groups indicated the delivery of compassionate care needs time. Caregivers have to commit their time to patients, and this was as significant feature of the responses from the students in this study. Communication goes naturally with competence and both nursing and medical students mentioned that besides listening to patients, communication skills are vital to answer their questions and explore their uncertainty about their problems or illness. This demands professional knowledge and attention, as well as an ability to explain difficult things clearly and with empathy and compassion.

Following a review of the full data-set, we concluded there was no difference between students’ definitions of care before clinical practice and after their first experience of practice. Both groups of students underlined relational character of care.

Because the literature suggests that gender can influence caring attitudes, i.e. women are supposed to be more caring than men [4, 5, 34], we tried to find if there is a difference between gender and given descriptions of care. The analysis of students’ statements indicated that gender was not a factor in defining care. We noted that men and women both indicated that their care was characterised by compassion; showing interest in the person and behaving in a manner which demonstrated empathy.

**Question 2: Carrying out care**

1. In everyday life

The analysis of students’ descriptions of carrying out care in everyday life showed no differences between medical and nursing students. We reviewed the situations of care giving provided by students to indicate (a) who were the care receivers and (b) what care giving actions were undertaken.

Care receivers were usually members of family, friends and neighbours, but also strangers met in the street. Example: ‘I think that I care each day for my family. It is difficult to describe a particular case. I show that I care for them in hard times when they are sick, but also in simple situations like moments of chatting, listening to them or helping them in their house work.’ (M1).

The people who the students cared for were mainly elderly or dependent on someone (grandmother, grandfather, older women or men in the street). Students first identified the needs for care and then performed their activity. This identification of care need/care eliciting on the part of the recipient is an important consideration. How do the student respondents know or come to understand that their care is being elicited by someone? We consider this to be an important emerging skill in care professionals and one possibly worthy of further study.

The most frequent actions mentioned by students were:

- Emotional dimensions of care: the care activities are accompanied by communication as an indispensable element.

Compassion and commitment is shown to care receivers through the student responses, particularly around the utilization of communication skills. The students pointed out that they made an effort in helping someone, that they were interested in someone’s condition, worried about someone, and that they were being present and the activities undertaken by students gave them the feeling of satisfaction.

2. In clinical practice

After clinical practice, we compared the students’ experiences from groups N2 and M2 and noted a broader variety of understanding of the care indicators among nursing students than medical students. Descriptions of nursing students indicated a necessity for time and patience in carrying out care. They were also aware of their own limitations and the effectiveness of activities performed by them (‘... when I saw how valuable my presence was to her I felt better myself and understood that what I had done made sense.’ (N2)). They understood the purposes of the care they gave and seemed to consider that care-giving was their main competence (‘All patients I had contact with needed to be shown care. It concerns each of them.’ (N2)). Medical students appeared to report care-giving on a more infrequent basis. Care was something special for them, additional to their routine activities, mainly in difficult situations. Some statements confirm this: ‘I had no such case’ (4 answers; students in the 5th year). They cared for patients only when there was nobody else to do it, or when they were asked to do it. (‘A lonely and immobilised patient needed someone to help him in eating and washing, someone who would like to listen to him.’ (M2)).

**DISCUSSION**

**Conceptual level of students’ care**

The statements used by students to describe care corresponded largely to the theoretical models of care, specifically those of Roach [27], Mayeroff [28], and Pellegrino [8], but also Fredriksson and Eriksson’s theory of the caring conversation [39, 40], as well as Gastmans’ [41] and Martinson’s [42] theories of care as moral practice.

Students specifically underlined communication, support and time in their set of categories to describe care. Communication should be seen as emotional and technical manifestations of care. It is emotional because before we start to communicate with another person we have to become interested in her or his situation and problems, and during communication we seek to maintain this interest and demonstrate this interest to the person. In this sense, communication has an ethical meaning.

Students identified this ethical perspective in their descriptions of listening to patients, as being patient, respectful, and trying to comfort and console. In their answers, we found that communication with care receivers permeates all their caring activities. In considering the
technical dimensions of communication, we usually include skills of good, clear and understandable communication with different people. Communication skills have an important place in clinical decision-making. Physicians as well as nurses have to know what, when and how to communicate with their patients [32].

Care-giving is a communication process which articulates to another that they are important to us and that we are willing to help. Fredriksson and Eriksson stated that 'the caring conversation, in the ethical context, is a conversation in which one person, through the ethos of caritas, makes room for a suffering person to regain his or her self-esteem, and thus make possible a good life' [39]. It is therefore not an understatement to say that communication is the vehicle for ethics [43, p. 58].

Support it is an important factor in the process of care. Social support falls into two categories: emotional and instrumental. Emotional support is often related to stressors, such as sadness, frustration, loneliness, low self-esteem, etc. Instrumental support is connected with supplying what is lacking materially, e.g. giving financial support [44]. Students recognized both categories of support in their definitions of care, but they particularly underlined the importance of emotional support when patients are in difficult situations. Looking for differences between support and care, some authors indicate that caring is a professional activity that needs knowledge and skills. Delivery of social support does not require professional maturity, and health care personnel are not the preferred providers of social support. They can offer it, but usually only when lay providers are not able to do so. Caring is more holistic while social support is more focused. Caring and support both involve interpersonal relations, sensitivity and empathy [44].

In both groups of students, the category of time was mentioned as necessary in the caring process. They saw caring as a time-consuming activity. We found this in definitions as well as in descriptions of carrying out care. Caring demands devotion of time. One medical student described a situation with an anxious patient: 'I had to give her much more time.' The category of time in the care process can be considered from two main perspectives. Firstly, from the patient perspective, each patient would like to be treated as unique and at the centre of the nurse's or physician's concern. Patients report dissatisfaction with services when they perceive caregivers as people in a hurry and/or attempting to control them [17, 45]. Secondly, the nurse or physician perspective is usually connected with difficult choices, such as, how to share their time fairly between patients. What criteria should decide that more time is spent with one patient than with another? Who has the right to decide about this, especially if patients have similar medical conditions? These questions have not only organizational meaning but they are also ethical choices. These issues remind us that time in the caring process has a moral meaning, both from the patients' and from the nurses' and physicians' perspective. Ethical sensitivity and competence of 'organizing time' is needed [46]. To develop a caring relationship with patients needs time. Sometimes, care means just to devote time to a patient.

The category of time goes with the category of communication. We need time to develop relationships with patients. Doctors often have limited time for patients, and interrupt and redirect their explanations because they are afraid that the length of their consultations would be exceeded if they let patients talk [47, 48]. Students indicated the importance of time in the caring process and the knowledge needed when giving explanations to patients.

The list of categories and their descriptions defining care are coincident not only with theoretical assumptions but also with the outcomes of empirical studies. Wilkes and Wallis [37] surveyed nursing students from two Australian Universities and obtained an analogical set of values describing care. The respondents' statements in our study enabled the students' to create models of care in which compassion constituted the core. Compassion is actualized by communication, activities that provide feelings of comfort for patients, competence, commitment, trust, conscience and courage, which are similar to a set of categories describing good nursing care in a group of Thai nursing students [49].

The development of understanding and carrying out care

The next area of our empirical research was to find answers to the two questions: "Does understanding of 'care' change; and does a more professional approach to care giving occur when students are further along their educational studies?" To answer these questions it was essential to explore any differences between the various groups surveyed, and learn how the concept of care-giving might change with practice. The more the professional experience gained by students, the more they know about care and the wider the range of caring behaviours can be observed. However, the study indicated that the capacity to define care is not necessarily co-terminus with an evolving and deepening appreciation of care-giving.

Analysis of the material seems to indicate that care of loved ones (mostly family members) is the main template for care-giving in professional care. This explains the source of caring attitudes on which to base the education of professional care behaviours. The ethical aspect of this is significant; the evolution of 'natural care' (care of loved ones) can with take maturity be directed towards the responsibility of taking care of strangers, from 'I want to take care of… (this person) to 'I ought to take care of… (this person)'[50].

When medical students shared their experiences of care-giving in practical settings they often said: 'she asked me…' or 'she started to cry so I had to…', 'there was nobody else to help.' This can be interpreted as a kind of objective pressure or coercion. In this sense there is no moral imperative that 'I am obliged to do it' or 'I am obliged to help.' Nursing students more often started their descriptions of a caring experience by using the first person: 'I felt that I had to stay longer', 'I tried my best', 'Nobody expected this of me but I did it'. In our opinion, this can be interpreted as a division of professional competencies. The students help patients as they have been professionally prepared. The cure-care division is seen as the instrumental versus the affective dimension of medicine in some research [51].

While nursing students carried out both dimensions of care in practice, medical students treated the practical or technical dimension of care (to care for), which is usually understood as a typically nursing activity [4] as an additional activity performed by them when there is nobody else around who could do it. In our study, there is no difference between nursing and medical students caring for their family members. The difference is seen when they start their clinical practice.
We do not claim that medical students do not care for patients. This study shows clearly the existence of an emotional dimension of care in the activities of medical students. This confirms the existing thesis that care is usually an expression of a physician’s caring about patients [4, 11]. Horowitz et al. [52] analyzed the written statements of general medicine physicians who participated in the workshops ‘Meaningful Experiences in Medicine’ between 1989 – 1995, which showed that physicians described the value of empathy or even love in relationships with patients, indicating non-technical interactions with patients as experiences that fulfilled them and reaffirmed their commitment to medicine. Such humanistic relationships turned out to be crucial in end-life-care or chronic disease care where there are no curative options. The presence of active care in medical practice for elderly patients with oncological problems was also clearly indicated by the medical students surveyed in this study.

The interesting question arose: Why have students not seen themselves as caregivers in the sense of their own definitions, and why is their process of carrying out care in clinical settings different from those definitions? It seems that students’ definitions were created more from the patients’ perspective than from their own perspective as future medical personnel. Unfortunately, practice quickly verifies this, as seen clearly in the medical students’ answers. Lack of time, organizational mistakes, and a strong care-cure division forces students to carry out a limited scope of care. The literature shows that patients’ ideals of physicians and the care definitions given by students in our research are quite similar. Both underline confidence and empathy, a humane and personal character of the relationship, and respect [29].

According to Baumann et al. [53], the dichotomy between cure and care should be replaced with a continuum between both types of activities. This would change the central focus of professional role divisions to a patient-centered model that meets patient needs. To achieve this, we believe that our current approach to education of health professionals needs to change. Implementing co-education of medical and nursing students in some study subjects would make this process easier. Among a number of similar proposals in the literature, some ethical issues could be taught to all health care professions better, improves communication between them, and develops the quality of care. In our opinion it would also alleviate the division between cure and care and focus more on patients’ needs.

Limitations of the study
Using a questionnaire and having only written answers from the students provided a limited view of care. For qualitative analysis interviews would provide a more vivid and experiential picture, with the possibility of getting deeper insight into students’ answers. We decided to use a questionnaire because the respondents were our students, and we did not want to put them under pressure. Our sample represents only one side of the caring relationship and to have a more holistic view of the care given by students, the recipients of care should ideally also be interviewed. This study was conducted with groups of students from one university only, and shows the educational tendency of this particular university. Additionally, we are exploring changes in perception of care-giving of students at different stages of their (novice) health care careers. Our interpretation may be stronger if we were to follow cohorts using a longitudinal methodology.

CONCLUSIONS
Care definitions given by the students did not differ among the groups. In both professional groups, care as a basic human trait was characterized by compassion, together with commitment, competence and communication. Analysis of the students’ descriptions of carrying out care in everyday life also showed no differences between groups. However, analysis of care activities in clinical practice in the groups of final year nursing and medical students showed a difference between nursing and medical students, the frequency of care giving and the dimensions of care giving. Nursing students carried out care using both practical and emotional dimensions. In the groups of medical students, emotional care alone was more present. There is no difference between any groups at this caring level.

Generally, definitions gave a care ideal that is not fully realized in practice. This is seen especially in medical students’ descriptions. They idealized care at the level of definition but did not see themselves as caregivers in the sense given as their ideal. Communication seems to be an element that connects the students’ theoretical and practical vision of care. It makes the care ideal workable. Students underlined the importance of time in caring and showed that time in this context has a moral meaning. The education of both groups of students should focus more specifically on the aspect of time in the caring process.

In response to the opening sentence that nurses and doctors care differently, we found that students of both nursing and medicine do not start off caring differently, but that after their practical placements they do indeed care differently. We believe that the transformation from everyday life practice of caring to professional practice is changed through professional education. The understanding of the concept of care is weighted to emotional intervention in medicine and to practical intervention in nursing. The basis is in how care is understood and taught. With combined education of all health care students these differences would be lessened and smoother and specific patient centered care would follow, with better cooperation among professionals and care teams, rather than fragmented care according to professional ideals.

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REFERENCES


