

Exploring the major difficulties perceived by residents in training: a pilot study

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Summary

Objectives: To assess residents' difficulties during the first year of residency. In contrast to previous studies that mainly used structured questionnaires, a qualitative procedure was applied.

Methods: Twenty-four consecutive first-year residents in internal medicine were asked to "Please identify two to three major difficulties or concerns related to your practice of medicine within this hospital". The answers were submitted to content analysis performed by three independent researchers. Inter-rater agreement was high (kappa coefficient = 0.92). Disagreements were solved by consensus.

Results: Physicians' characteristics: female 37%, mean age 28 ± 2.2 years, mean duration of postgraduate training 2.5 ± 1.3 years. Total number of answers: 122, average answers/resident 5.1 ± 1.3 . Nine categories were extracted from content analysis: communication problems at the workplace, feelings of not being respected, constraints of collaborative work, experiencing the gap be-

tween medical school and clinical care, work overload, responsibility towards and emotional investment in patients, worries about career plans, and lack of theoretical knowledge. Residents expressed major difficulties in communicating with and being respected by seniors and peers in particular, and hospital staff in general. They also voiced problems in coping with emotions, either their own or those of their patients.

Conclusions: The residents' responses stressed the complexity of blending the requirements of the physician's role when instrumental/cognitive knowledge is not sufficient to deal with problems requiring personal and relational dimensions. Learning to combine medical knowledge and practice necessitates helping students/residents identify and deal with the constraints of these requirements.

Key words: resident; stress sources; medical training; physician's role; medical values and norms

Introduction

Residents face many challenges during their postgraduate training, which can lead to emotional distress [1–4]. Commonly cited factors associated with residents' emotional distress are heavy workloads, sleep deprivation, complaints from the patients and their relatives, insufficient knowledge, poor learning environments, but also a high degree of peer competition, uncertain career plans and socio-cultural or financial issues [2, 5–10]. These findings are not always consistent, however, and may be criticised because of measurement issues. Confounding variables include depression [11–13], irritability [14], anxiety and substance abuse [15–17]. In a recent study, 76% of the residents met the criteria for burn-out [18], 23% thought they had become less humanistic, and a majority reported becoming more cynical [19] or other changes in mood states and empathy over the course of their residency training [20]. Recom-

mendations for prevention or remediation programs have been proposed [6, 21–22] but little evidence is available to guide these changes, and the extent to which they may improve emotional distress in residents remains unknown [23].

Judging from our experience, however, important factors causing emotional distress in residents may have been overlooked since previous studies relied on structured questionnaires and did not address more personal aspects – daily confrontation with pain and suffering, difficulty to meet limitless demands with limited therapeutic means or lack of time for personal life – that may arise when applying qualitative procedures [24]. We therefore conducted a pilot study using an open-enquiry approach to investigate the difficulties perceived by internal medicine residents in our institution during their first year of residency.

Methods

The study was conducted at an internal medicine sub-acute ward of a public teaching hospital (Geneva University Hospital). This 98 bed facility is devoted to medical rehabilitation, psychosocial and palliative care. Patients are transferred either from acute care medical (about 55%) or emergency wards (35%), or referred directly by their general practitioner (10%). The median length of stay in 2001 was 15 days (mean 23 days).

The study sample consisted of 24 consecutive first-year residents completing a 3 month rotation in the ward between January and December 2001. Each resident was in charge of a unit of 14 to 19 patients and worked 65 hours per week on average (Geneva University Hospital statistics, 2000-2001). The senior staff physicians each supervised three units.

At a regular staff meeting, all the residents were presented with the following query in a written form: "Please identify two to three major difficulties or concerns related to your practice of medicine in this hospital". The question and its format were pre-tested on a subset of residents. The residents were asked to return their responses anonymously within a week, using a prepared envelope in order

to further ensure complete anonymity. Since the rotation in the rehabilitation clinic constitutes only a quarter of the first-year residency program, the scope of the question for most of the residents also included experience on the acute bed internal medicine ward.

The format of the question (open-ended) and of the responses (free responses on a blank sheet) allowed the collection of data that could be submitted to content analysis [25-27].

Three researchers, a senior resident of the rehabilitation clinic, an attending physician on the acute-bed internal medicine ward, and a sociologist performed this analysis. Firstly, broad categories encompassing the difficulties/concerns expressed by the residents were identified by the main investigator using a manual data indexing technique to identify key themes [28]. Secondly, these categories were discussed and refined by consensus between the three researchers. Thirdly, these researchers independently classified the residents' answers into those categories. Inter-rater agreement was high (kappa coefficient = 0.92), disagreements were solved by consensus.

Results

All 24 residents completing their three-month rotation at the rehabilitation clinic participated to the study. The mean resident age was 28 ± 2.2 years, 37% were women. They had an average postgraduate training duration of 2.5 ± 1.3 years (in Switzerland, most residents begin their training after medical school in non-university hospitals).

Nine categories were extracted from the content analysis, i.e. "communication problems at the workplace", "feelings of not being respected", "constraints of collaborative work", "experiencing a gap between medical school and clinical care", "work overload", "responsibility towards and emotional investment in patients", "worries about career plans", and "lack of theoretical knowledge".

The total of answers given by the 24 participating residents was 122, with an average number of answers per resident of 5.1 ± 1.3 . As 52 out of 122 answers included two different categories of difficulties/concerns regrouped into the same sentence, they were split for analysis, yielding a total of 173 analysed items.

Communication problems at the workplace

Twenty-one of the 24 residents (88%) identified problems of communication within the workplace as one of their major concerns. This category encompassed various aspects of symmetrical vs. asymmetrical relationships with peers or with senior residents. It emphasised not only the contents of communication but also its relational context.

Resident 1: "to communicate clearly, especially with the senior residents, to make them understand our residents' concerns"

Resident 5: "It is difficult to communicate well with colleagues, and particularly, to feel that one is being clearly understood"

Communication difficulties with medical staff were given a special emphasis, with 19 residents mentioning this type of concern.

Communication problems with patients were also pointed out (in about half of the respondents).

Resident 10: "[it is difficult] to know how to speak to the patients, how to comfort them and to make the proper decisions in order to help them"

Fifty-four answers were classified into this category (31% of the 173 analyzed items).

Experiencing a gap between medical school and clinical care

Fifteen of the residents (63%) expressed concerns related to lack of competence, inadequacy of theoretical training to deal with practical clinical care, or definition of their professional role. This category included occupational stressors related to proficiency in knowledge and/or expertise and its sequelae in terms of self-doubt and awareness of (sometimes) realistic limitations.

Resident 7: "I feel a big change since the end of my studies. Firstly the working hours, the shock of having patients, of having to make decisions and to have learned things lacking in practical use"

Resident 6: "the difficulties of going from very theoretical studies to real practice"

Resident 18: "to accept that one knows nothing after so many years when even the nurses know more than we do"

Twenty-seven answers were classified into this category (16% of the analyzed items).

Feelings of not being respected

Fourteen residents (58%) felt that they were not respected as people and/or as professionals, that their needs were not taken into account or that they did not receive adequate support.

Resident 12: “there is a lack of respect for what we are doing. I do not feel I get any understanding if I say I am overbooked or stressed or I need a vacation”;

Resident 17: “when I tell the senior resident or the attending physician that I cannot do more than I am already doing, I feel that they do not believe me”

Twenty-nine answers were classified into this category (17% of the analyzed items).

Work overload

This category comprised professional stress related issues such as perceived heavy work demands or long working hours, and personal issues such as limited free time to relax and build on other sources of interest and support. This was a common concern expressed by 14 of the residents (58%).

Resident 3: “there are too many presentations to prepare which means too much theoretical work aside from the rest of our duties, with the patients and with their families”

Resident 11: “to have more time to spend on understanding the meaning of our care, to know what’s really helpful to the patients”

Resident 12: “it is not acknowledged how difficult our job is: inordinate hours, stress, sacrificing one’s private life ...”

Resident 6: “the most difficult thing is to find time for myself, to do something which allows me to come back the next day and to work with renewed energy”.

Twenty-two answers were classified into this category (12% of the analyzed items).

Responsibility and emotional investment towards patients

This category regrouped responses referring to the residents’ reactions when facing not only diseased but also suffering patients, and thus the complexity of their duties. This is how the 12 residents (50%) who voiced this difficulty described it.

Resident 20: “to be aware that what one thinks is the best for the patient, is not always the best from his/her perspective (investigations, diagnostic procedures)”

Resident 18: “to remain alone at the frontline, being face to face with the patient”

Resident 8: “to think of everything, to be also aware of our legal responsibility and of the fact we do not always know all that we should”

Twenty-four answers were classified into this category (14% of the analyzed items).

Constraints of collaborative work

This was cited by seven residents (29%) and underlined the needs and the constraints of collaborative work – and even the reliance on relationships with other staff members – especially for doctors beginning a residency program.

Resident 24: “it’s difficult to be accepted by the existing staff (nurses, peers, senior supervising physicians), and if one isn’t, you’re dead”

Resident 13: “to be reliable, to be able to deserve your colleagues’ trust”.

Eight answers were classified into this category (4% of the analyzed items).

Preoccupations about career plans

Such concerns were expressed by four residents (17%) and referred to their expectations and needs to obtain help in planning their career.

Resident 3: “[I expect] that my boss becomes more involved in my training, so that I can receive more information on what I can do professionally”

Resident 4: “[it is difficult] to get more help and counseling for my career”.

Six answers were classified into this category (3% of the analyzed items).

Insufficiency of theoretical knowledge

Finally, only two residents (8%) cited insufficient theoretical knowledge as one of their major difficulties.

Resident 4: “to be more proficient in basic sciences and physiopathology in order to explain and treat diseases”

Two answers were classified into this category (1% of the analysed items).

Non-classified answers

Although they provided other responses, four residents (17%) also gave answers, which did not explicitly state the nature of the difficulty. These answers were entered in a “non-classified” category:

Resident 20: “to take care of the students”

Resident 21: “to take into account the patient’s situation”

Four answers were classified into this category (2% of the analysed items).

Discussion

Some of the sources of difficulties and concerns highlighted by the residents involved in our survey (conflict of roles, difficult patients, workload, and lack of counselling for career plans) are similar to those found in previous studies based on

structured questionnaires in Switzerland [4] as well as in other countries [6–7], or on qualitative procedures [24]. However, our results set a strong and contrasting emphasis on difficulties in communicating with seniors and peers as well as with

patients, lack of recognition, and troubles in coping with the various aspects of the medical profession. The results of the content analysis further stress the importance of the difficulties in communicating with seniors and peers with three categories out of nine referring to this aspect ("communication problems at the workplace", "feelings of not being respected", and "constraints of collaborative work"). These difficulties are strongly interrelated as the perception of receiving little attention and/or respect from senior colleagues may prevent the residents from addressing their supervisors when seeking emotional comfort and debriefing of their instrumental and/or relational difficulties [29]. As Resident 1 and 17, respectively, put it: "[it is difficult] *to communicate clearly, especially with the senior residents, to make them understand our residents' concerns*" and "*when I tell the senior resident or the attending physician that I cannot do more than I am already doing, I feel that they do not believe me*". The residents may then feel abandoned at the bedside in many instances requiring finely honed communication skills with the patient whereas seniors may have the impression that they provide appropriate support and teaching opportunities – mostly in the form of theoretical knowledge about diagnostic and therapeutic strategies – thus further fuelling the misunderstanding between both parties.

The responses of the residents further stressed the importance of these difficulties when instrumental/cognitive knowledge is not sufficient to deal with problems calling upon personal and relational dimensions. Indeed, many residents complained that their pregraduate training had prepared them inadequately to perform their clinical duties. As one of our respondents indicated: "*I feel a big change since the end of my studies: firstly the working hours, the shock of having patients, to have to make decisions and to have learned things without any practical use*" (Resident 7). Interestingly, only a small minority (two residents out of 24) cited lack of theoretical knowledge as the source of their problem, whereas the majority expressed difficulties in dealing with practical and interpersonal aspects of patient care. Many of our residents' comments suggested that they were emotionally very challenged by their encounter with patients' suffering. Finally, residents cited many times using different formulations that they felt helpless on learning the distance between medical response and patient expectations. This was expressed in terms of "communication problems at the workplace", "experiencing a gap between medical school and clinical care", or "responsibility towards and emotional investment in patients", with responses such as: "*to be aware that what one thinks is the best for the patient, is not always the best from his/her perspective (investigations, diagnostic procedures)*" (Resident 20).

Beyond the necessary endeavour to make attending physicians/medical staff more aware of the residents' emotional difficulties and communication problems, the interconnection between these

dimensions and those regarding instrumental/cognitive concerns or difficulties is an important issue when it comes to improving medical education and decreasing residents' concerns. Medical knowledge and practice involve both biomedical and relational levels. Indeed, medical knowledge is complex, evolving, and should be integrated in a mastered relationship not only with the patients but also with the health care professionals, particularly seniors and peers. Furthermore, this relationship is essentially dynamic, being constantly redefined and renegotiated.

Thus, mastering this relationship is no easy goal to reach, and the socially constructed aspects of medical knowledge and education have been repeatedly acknowledged over the years [30–34]. Merton [30] has described medical education as "facing the task of enabling students to learn how to blend incompatible or potentially incompatible norms and values into a functionally consistent whole", and defined these norms and values as the requirements of the physician's role. They refer to three broad dimensions with incompatible or potentially incompatible characteristics pertaining to the numerous dual constraints they impose on the physicians; in terms of self-image (e.g. physicians must have a sense of autonomy and take the burden of responsibility, but autonomy must be coupled with a due sense of humility and not be allowed to become complacent); in terms of their relations to patients (e.g. they must not overly identify with patients, but nevertheless must avoid becoming insensitive through excessive detachment); and in terms of their relations to colleagues (e.g. they must collaborate with a multidisciplinary team rather than dominate, and yet take final responsibility for the team and they must be involved in stimulating this team to meet high standards of care). Indeed, the categories drawn from the analysis of our residents' responses reflect these dual constraints linked to the physician's role and its requirements. Bridging the gap between graduation from medical school and becoming a board-eligible physician is a lengthy and arduous process. Residents' difficulties and sources of stress – mainly in their first years – may be linked to their own ambivalence when they enter into scientific and interpersonal transactions, which they have not yet mastered. That is, when it comes "*to know how to comfort the patients and to make proper decisions in order to help them*" (Resident 10); "*[to have] many presentations to prepare besides the rest of our [clinical] duties*" (Resident 3); "*[to lack] time to spend on understanding the meaning of our care*" (Resident 11); "*to be accepted by the existing staff (nurses, peers, senior supervising physicians)*" (Resident 24); and "*to be proficient in basic sciences in order to explain and treat diseases*" (Resident 4).

This study has limitations. The written response to a single question limits the probes that might help find deeper insights or crafting better questions. Our sample was small, although the frequency of repetitive statements suggests that ex-

tending our enquiry to a greater number of residents would not have yielded very different concerns. Besides, the sample was adequate in terms of size to address a qualitative pilot study, and was most probably representative of Swiss first-year residents in teaching hospitals (regarding their selection process, type of work, work hours, and length of postgraduate training). Generalization is indeed an important question. As residents only spend three months in rehabilitation during their first year of training in our institution, this pilot study addressed the residents' experience not only in a general subacute rehabilitation ward but also in acute general internal medicine wards. At least some of our residents' concerns may be directly linked with factors specific to our institution (pre-graduate medical education was still a traditional lecture-based curriculum at the time most of these residents were trained) or with stress outside of work as an independent cause of concern. Our senior staff may be particularly disrespectful of residents and unaware of their learning requirements regarding bedside skills. However, the confrontation with patients' suffering and expectations is an emotional experience that is universal for young doctors, and possibly rendered more taxing by their "sense of responsibility" towards their patients, as was expressed consistently in our residents' statements.

This pilot qualitative study sheds new light on the difficulties and training needs of our residents and on the frequent inadequacy of senior and other hospital staff's response to those needs. It is plausible that such findings could be generalised to other medical schools if open-ended questioning were used. These data could serve as a means to develop an interview guide for further deeper

qualitative inquiry or a survey of a representative group.

In terms of residency programs, regular educational and training components could provide opportunities to clarify the tasks and the roles of junior and senior staff. Whether providing a secure setting for regular debriefing between residents with or without their seniors may be helpful in relieving them of their emotional burden remains to be investigated, however [22, 35]. The same is true, at least partly, for regulations that restrict residents' working hours. In either case, faculty and attending physicians need to be aware of this phenomenon, so it can be regularly discussed during informal and formal sessions, such as in Balint or "reflective practice" [36] groups, for example. Furthermore, disentangling the complexity of medical knowledge and practice would probably require that students and residents are helped to learn to identify and deal with the constraints of the requirements of the physician's role [37]. It would also involve questioning the assumption that the physician's and the patient's characteristics are not relevant, that is, to probe the sociocultural framework of medical knowledge and practice.

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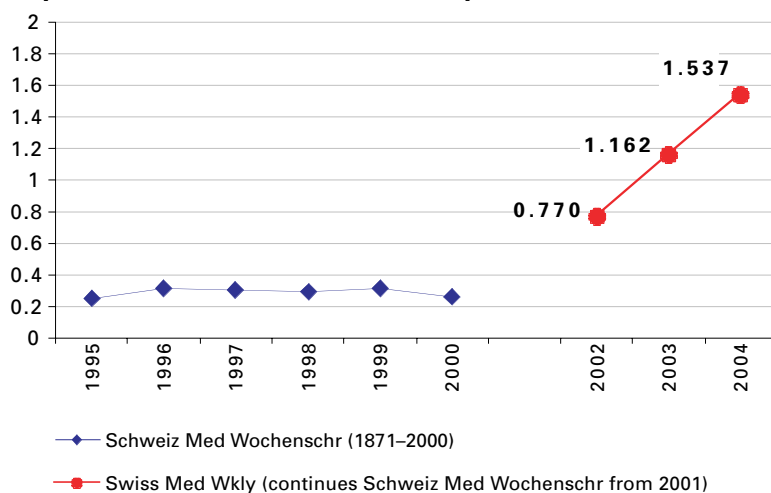
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