

Supplementary materials

This material contains labelled excerpts from interviews that were used to identify categories and themes, with their respective variations. Categories and themes were used then to determine the patterns that a physician's experience during his/her journey from clinician to medical teachers.

CATEGORIES

Category A: Responsibility focus

This category of concepts refers to how interviewees discriminate their responsibility between practitioner and teacher. It means the degree of awareness of independence of these two types of responsibilities. On one side, in the variation, I labelled '*dependent*', there are participants who believe that teaching is part of their clinical duties therefore they do not need to develop any other personal capabilities in teaching.

At the beginning, I understood teaching as something ideal; I mean something to accomplish the statement from the Hippocratic Oath. I thought that teaching was compulsory to physicians. I5-A3

Some of these participants had assumed teaching as part of their commitment to medical professionalism.

In some way, teaching capabilities were given to me in an intuitive way because as doctor I have taught all my life. I8A1

Therefore, the *Dependent* variation describes those participants who are not aware of the differences between their responsibility as clinicians and their responsibility as teachers.

On the other side of the continuum is the variation I labelled '*independent*'. There are participants who believe that teaching is a new personal challenge for them as professionals and are able to acknowledge the difference between these two roles:

I do not understand medicine without teaching. I mean I believe that medicine has behind a permanent desire for learning as well as a permanent desire for teaching. For me, medicine and teaching are vocations that should be overt. However, each of them needs particular skills to be developed. I10A9

The individuals are aware of many particular aspects of teaching therefore; they have devised some teaching activities as an independent but complementary activity to their clinical practice:

I use my medical knowledge to be learned by the students but also; they should learn what to do with that knowledge. I provide a role model to students. Using those things, they can decide, accordingly their way of thinking, if they apply those things and become a physician able to grow up without teachers help I10A2

Therefore, the *Independent* variation on this category describes participants who were aware of differences in responsibilities in doing teaching and in doing medical practice

Category B: Teaching scholarship

Teaching scholarship was explored with questions seeking to search intentions and purposes of practitioners in teaching and some examples of their teaching strategies. For example, by asking about how they have designed learning objectives and what elements

they have taken into consideration in designing and planning teaching activities. Additionally, questions about the strategies and practices they have used were explored. Alignment of intentions with actions and outcomes was the key concept in exploring this aspect of clinical teaching. Variations ranged from those who intended just to transmit basic information using activities such as lectures and seminars, to those who intend to transform the student's life relying on their particularities acknowledging diversity in students as a challenge not as a difficulty. For the first group, labelled '*Teacher centred*' variation, recovering the information teachers have transmitted to students, is the main process that they mentioned as the grounds to succeed in clinical courses:

The learning objectives should include those things you will teach, the impact of my teaching on the results and, how students are getting theories to use it on a personal way
I2-A1

Statements usually referred to giving some students knowledge and skills, which were necessary to be assessed as the only final result of educational processes:

Good teaching in Medicine is reached when you can see the result on your students. You want students learn something, you give them some tips you believe are very important for the rest of their life, then you explore if students have learn those things you have given them, so that you can be sure that students reach the objective which is to learn some things you are transmitting to them. I3-A1

For those who intend to transform a student's life, '*Student Centred*' variation, reflection is the most useful process. They are concerned about how students apply knowledge, and are aware of the students' needs together with their learning challenges and the role of doctors in society:

To my mind the most important thing in teaching medicine is to integrate many of the circumstances around humans. Traditionally, teaching medicine has been focused on science and oriented by positivism; therefore, it had left apart some parts of humanism like

spiritual, psychological and mental parts. It is necessary to include these parts to an integral medical education. IIA1

Statements referring to humanism and social commitment identify this variation:

Good medical teaching should accomplish the purposes of students, teachers, institution, and community. Student's purpose is to learn the art and the science of medicine; teacher's purpose is to help students to reach their purpose in a proper way and accordingly to his/her own principles as physician and educator. The purposes of society should be accomplished by medicine-graduated professionals, getting strong medical structure in science and humanism to satisfy expectations and needs of society and to give a good health care. I10A1

Category C: Teacher mood

Teacher mood refers mainly to feelings teachers are aware about their teaching practices. Some teachers' feelings show a sense of powerlessness in their teaching activities achieving their objectives. There are teachers who feel that education is something not only abstract and impossible to be measured but also too complex. Teaching requires a lot of resources and varied conditions, which might produce in them feelings of failure and frustration. Some participants state during their interviews an '*explaining away*' set of expressions intending to justify their drawbacks regarding teaching. They tend to look for reasons for their teaching difficulties outside of themselves, explaining their weaknesses as the result of multiple circumstances they do not have available tools to cope with. Consequently, there were statements that intended to justify themselves for those things they understand as susceptible to be improved, but due to external reasons they have not enough motivation to work on those improvements and, therefore, their actions are not as they would want. A feeling of powerlessness is behind those expressions, so that these participants are paralysed by the search for explanations instead of looking for new strategies to implement changes they are aware are needed. The question here is about justification for their

incapability in transforming themselves according to their new role as medical teachers. I labelled this variation *Explaining Away* of Teachers mood category.

There were explanations about weaknesses in teaching tasks that were justified as being due to organizational reasons from institutions' they work at or from particular course conditions:

I believe that university and institutions have done almost nothing to motivate teacher to develop new teaching methodologies. We still find classrooms, blackboards and infrastructure that bring about old-fashioned ways of teaching. Teachers want to change but institutions do not let them to change. Probably, humans need to work for that change.
I2-A11

Another type of explanation came from within teachers. They referred to time management, lacking of pedagogical literacy or heavy workload:

I usually compare today's medicine to any other profession. That is new for me. In the past I use to believe that medical teachers and medical students do not have schedules, we lived in function of medicine. Currently, things work accordingly standards of productivity. Once, the class time has finished everyone went out, including students. I8A7

The main aspect characterising this variation is a tendency for participants to explain, using a variety of reasons the limited degree of satisfaction they obtain from the quality of their teaching.

On the other side there are teachers who believe that teaching is a new pathway for them in reaching professional and personal goals. During these interviews, I was able to detect a hopeful attitude to teaching. It means that participants have done many kinds of things to improve their teaching since they understand that this is a better way to reach higher levels of personal development. These

actions have been the result of a trial and error strategy that has informed them about good and bad educational outcomes. They were willing to defend their teaching with many arguments and frequently they said how important teaching has been for them. They are “transcending” by teaching, because they recognise teaching as a means to influence others’ lives in spite of the fact that they are people who have just a temporal and limited relation with students they teach. However, this is a worthy opportunity to help them in reaching their goals. I labelled this variation *Transcending*.

This type of teacher states his/her commitment in teaching by acknowledging its complexity:

To my mind teachers should be clear about what is the dynamic of their actions. Those actions resume the expectations and needs of one generation that is looking for what teacher can offer to themt. 11-A5

I think that in teaching I'm putting something from myself on what I'm teaching because of teaching is not only the written knowledge. 18A3

Also there was reference to commitment with teaching as part of his / her aim in life:

I always emphasize to students to be aware of the vocation concept. Vocation is motivation and willingness to act accordingly their conceptions and values. This thing let them know what their objectives are and, to what direction to work. 15-A6

Category D: Satisfaction source

Like any human activity that involves interaction between more than one person, teaching satisfaction and acknowledgment for those activities one has done is an important part in motivation and improving self-esteem. Teachers find recognition from two main sources: From the teaching activity itself, which motivates them to improve their professional

activities as a teacher and as a doctor, or from students they have helped in the learning process. Participants state that some of them have satisfaction from encounters with doctors they have taught in the past. I labelled this '*From Product*'. They said these are good opportunities to assess themselves as teachers and to recognise how good the outcomes of their teaching process are.

Some participants stated that this feeling of satisfaction arose when they could realise that graduates have gained some of the skills or knowledge that they had taught to them:

Teaching has given me many satisfactions. Looking how students become doctors, getting some knowledge from my speciality and also by realise that they are now able to develop new knowledge to serve people. This is too meaningful to me. I2-A11

Other statements teachers mentioned as a way of getting personal satisfaction stated as a particular sort of recognition by graduates, who evocate the teacher during his or her medical practice:

You as teacher can print on students what you want to print. I try to find feedback from students, probably by self-satisfaction. If they are able to remember me in particular situation I use that feedback as motivation to my teaching. I2-A11

Others said that they have gained their satisfaction by doing teaching according to “the right way” of doing things. Statements related to this category pointed out feeling of satisfaction that have arisen during different moments of teaching activities. Also mention some benefits teachers have gained from teaching simultaneously with practicing medicine. I have labelled this variation *From Process*.

Satisfaction appears because teaching was considered as new opportunity to reach personal and professional goals:

Teaching has let me to put in practice many of my potentialities I have created and have stored during my professional life. I1-A21

Everyone who is teacher is up to dated, is a person who take risks of been assessed and critiqued by students. I like teaching because activate my mind and let me to be in touch with young people. This has been an existing experience for me. I9A24

Another source of internal satisfaction were challenges to develop new capabilities and gave them opportunities to attain academic outcomes:

Activities of transmitting knowledge are non-stop activities. The process let me to recognise my weaknesses and to modify my attitudes. This has got me satisfaction as a person, because I can do things correctly. I6A14

Permanent contact with students who represent young people was mentioned as another way of getting satisfaction and reward.

Permanent contact with young people makes me look to my life in a different way. Students are ageing but new students have the same age as those who have left the courses. I10A9

STAGES OF THEMES

Stage Clinican from identity theme

They are focused on medical knowledge; their main goal is to enhance the students' body of medical knowledge. Participants statements were mainly referring to teaching as an obligation linked to their work and a feeling of powerlessness of teaching in contrast with their effectiveness in doing their clinical tasks. Their activities in teaching were designed

with a focus on what the teacher does. Students were passive actors in the educational environments. This stage includes concepts raised from the dependent variation of the category 'Responsibility focus' (category A), and from the teacher centred variation of 'Teaching scholarship' category (category B).

Some participants stated that there is no difference between the skills needed to practice medicine and skills needed to teach:

You realise that you don't know how to teach, however I don't know why you can't improve those skills. I think this is because of teaching in this country has a very low level of recognition and the incomes are not the better ones. This profession has been misunderstood by society; therefore, there are neither stimuli nor recognition by governments or people. I2-A12

There were also expressions regarding drawbacks in their backgrounds as clinicians, which can affect their teaching skills:

My main reason to begin teaching was as to get more money, in other words teaching is another work physicians can do. The main problem is that almost every one forgets that for transforming to medical teachers it is necessary to learn how to research. Nobody teach us how to research, so that research projects during my educational process were usefulness, then you realizes that your research project has not grounds. I3-A15

Educator stage from teacher identity theme.

Educator stage for Identity theme identifies those participants who have built up a new professional identity that has taken some elements from their clinical identity but there are new elements that appear overtly during interviews. They were enthusiastic and creative about teaching. Their teaching scholarship enabled them to enhance their teaching capabilities and to bring about friendly learning environments. They are aware of the difference between their teaching responsibilities and their responsibilities as clinicians.

They have acknowledged not only the active student's role in the educational environment but also their feedback as the main source in adjusting to teaching strategies.

They mentioned some degree of concern about their low level of knowledge regarding teaching as a different field from their clinical knowledge:

In reaching my ideal as teacher I need to learn more about theories of teaching and learning, I mean those educational theories that let me to improve my teaching. Additionally, I believe that I will get my retire without reaching my ideal teaching capabilities due to students are the source of teacher's changes. In doing teaching you are changing permanently because of students feedback. I3-A9

There was evidence of changing the approach from teacher centred to student-centred:

Teaching have evolves since I was student. Those days I was a passive element into the learning environment. I only got information from my teachers in one-way process of transmitting information. Currently, I know that this is a two way communication process. Students get concepts from teacher, then they elaborate them and decide if they will use them accordingly the importance of those concepts. In other words at the beginning I believe that teaching was the only responsibility of the teacher, now I believe that students should be active on this process. I9A5

Summing up, the 'identity' theme is related to the object of the journey that clinicians undertake to become clinical teachers. There were elements from the focus of its responsibility that have evolved from being dependent on their clinical role to an independent responsibility as important as their clinical responsibility (Category A). Another element of the change from teacher centred approaches to student centred approaches was that attained by the enhancement of their teaching scholarship (Category B).

Preparation stage from changing process theme

Preparation stage identifies those teachers, who stated intentions and are aware of some aspects to be adapted in teaching, but there were no statements regarding actual changes or strategies that reflect how those intentions have transformed their teaching tasks.

Statements expressing explanations for the gap between the things they should do in teaching and the things they are doing (ie, the ‘explaining away’ variation), were extracted to feed this stage. Statements that support a sense of external source of satisfaction (ie, ‘from the product’ variation) also were taken into consideration. They get rewards and satisfaction from external sources such as student recognition for their educational interventions or institutional promotions because of their teaching responsibilities:

Good medical teaching should be done with enough time and dedication to transmit the knowledge I have got not only theory but also practical. I have to show them the stages of medical development including attitudes. I have tried to teach them how to think, how to make decision to handle different medical situations taken into consideration the available resources. Students neither were focused nor willing to learn. They looked like a clock; as soon as the class time has finished they disappear in despite I have invited them to do some task to improve their learning. They use to complain for their high workload, lacking of time and so on. Really, I felt frustrated therefore I end up quitting. I12A2

Action stage from changing process theme

The *Action stage* for describes participants who stated how they have adapted their practices to those new concepts that they are aware of, so that they are doing teaching in a new way. They were acting on previous decisions, experiences, new skills and motivations for making the change. There were elements from ‘*transcending*’ variation of category C and also elements from ‘*from process*’ variation of category D:

In teaching the most important thing is not what or how I am teaching, but what did students, and which of those things they have learnt could be applied learn. In doing

so I give them in advance some bibliography to be revised by them, then we revise the information they have extract from their reading but using their own words. Relied on knowledge they bring into the class I question them emphasizing in how they should use the knowledge. For instance in examining a patient with a leg ulcer they should not only look to the ulcer but also to assess the pulse quality. In other words it is helping them to interpret what they have read and to apply it on clinical practice. I9A7

The journey as a movement may never be completed. Many things might affect the changing process. In the beginning the person may just try to see what works and to find out what happens. They might move from one variation to another in a back and forward movement, may be for some time, perhaps forever. The journey as a movement within two variations might follow some patterns that deserve a further description.