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Validation of a self-assessment scale of PATIENT-CENTERED MEDICINE

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RESUMO

Introdução e objetivos: A Medicina Centrada na Pessoa, ao ser implementada como atividade diária, tem demonstrado ter um impacto positivo na saúde dos médicos e na dos que os consultam. Com quatro componentes: "Explorando a saúde, a doença e as perceções de doença", "Percebendo a pessoa como um todo", "Encontrando terreno comum" e "Melhorando a relação médico-pessoa". Dada a falta de investigação em Portugal sobre este tema, considerou-se apropriado saber como este conceito é desempenhado nos seus vários capítulos pelos médicos no Internato de Especialidade de Medicina Geral e Familiar na Região Centro de Portugal, segundo a frequência de formação quer em Medicina Centrada na Pessoa e Consulta Centrada na Pessoa assim como a noção de desempenhar este tipo de consulta.

Material e métodos: Estudo observacional pela aplicação informática on-line, após envio a todos os internos da região centro por e-mail de um questionário validado, baseado nos quatro componentes sugeridos por Moira Stewart *et al* em "Patient-Centered Medicine- Transforming the Clinical Method". Incluíram-se ainda perguntas sobre o género, ano de entrada no internato de especialidade, e frequência de formação quer em Medicina Centrada na Pessoa quer em Consulta Centrada na Pessoa. Foi realizada estatística descritiva e inferencial.

Resultados: Estudou-se uma amostra de n=94 internos, 73 (78%) do sexo feminino, 66 (29,8%) trabalhando em Unidade de Saúde Familiar (USF). Não foram encontradas diferenças entre género e ano de Internato para cada componente do método. Para n=24 (25,5%) houve frequência de formação específica em Medicina Centrada na Pessoa e para n=72 (76,6%) existe a crença de praticar Medicina Centrada na Pessoa. O teste alfa de Cronbach teve um valor de 0,749 sendo o pior valor de componente (valor médio/total pontual possível) para "Entendendo a pessoa como um todo" (044), seguido de "Explorando a saúde, a doença e a experiência de doença" (0,52). Significativamente quem julga praticar Medicina Centrada na Pessoa percebe melhor a pessoa como um todo (p=0,020).

Discussão e Conclusões:

A Medicina Centrada na Pessoa não deve ser considerada como um método rígido para a realização de consulta devendo este questionário ser entendido como uma ferramenta de quantificação para autoaprendizagem nos seus vários capítulos. Este estudo teve uma amostra limitada e com possível viés de performance. Ainda assim, dados os resultados, sugere-se a realização de formação específica sobre o tema e que seja explorada melhor a dificuldade em entender a pessoa como um todo, verificada nesta amostra.

Palavras-Chave: Medicina Centrada na Pessoa, Medicina Geral e Familiar, Relação Médico-Doente

ABSTRACT

Background: There has been increasing evidence that Patient-Centered Medicine is a valuable concept that should be implemented in our daily practice, as it has a proven to have a positive impact on the patient's health outcome. Considering the lack of investigation within this topic in Portugal, it seemed appropriate to understand how the main pawns of this concept where actually embracing it and to which extend they understand their usage of it.

Objectives: Validate a self-assessment scale for health professionals on Patient-Centered Medicine

Materials and Methods: Materials and Methods: We conducted an observational study using a questionnaire based on the 4 components suggested by Moira Stewart *et al* on Patient-Centered Medicine. We also included questions regarding gender, year of residency and asked about whether they had training regarding Patient-Centered Medicine. Subsequently, we searched for possible differences in the results between groups in terms of self-perception of their medical practice.

Results: A sample of n=94 interns was studied, 73 of which were women (78%), 66 of the sample (29,8%) working in Family Health Units (USF). No differences were found between gender, year of residency and early training for each Patient-Centered Medicine component. Out of this sample, 24 (25,5%) had attended some kind of specific training on Patient-Centered Medicine or on consultation on Patient-Centered Medicine, and 72 (76,6%) believed to practice Patient-Centered Medicine daily. The Cronbach's alfa was of 0,749 and the worst result when exploring the Best/Median ratio was for "Understanding the whole person" (044), followed by "Exploring health, disease and the illness experience" (0,52). Significantly, those who believe to practice PCM better understand the person as a whole (p=0,020)

Discussion and Conclusion: Although Patient-Centered Medicine should not be considered a rigid method with standardized procedures and established medical interviews, one must think about the method as an example of shared responsibilities towards better health. This scale is an attempt to quantify the quality of the care professionals believe they are delivering to their patients by studying specific domains of the Patient-Centered Medicine. The greatest interest of this study being the link between self-assessment and the actual behavior of these physicians, causes these results to still be unclear for their purpose. Most of the internees of this sample had not yet been introduced to the concept and methodology of Patient-Centered Medicine, but seemed to believe they were properly implementing it, thus enforcing the need to adequately address the issue.

Introduction

Throughout the 20th century, great progress has been witnessed in medicine. As a result of a huge technological improvement, we are now able to diagnose faster and more precisely.

We began to understand and focus on the logical and biological explanation of any cause of disturbance to our health. As human beings, our need to question everything and our hunger for justifying has overtaken us.

We have been absorbed into an overwhelming flood of new information, looking for proof and evidence of any kind, creating guidelines[1] to guide us while navigating through them, drifting our attention to screens rather than meeting the patient's gaze and other forms of non-verbal communication.

We have made considerable advances in science, but we have done so at the price of slowly withdrawing from the human connection and affective interactions we owed, disengaging ourselves from the patient-physician relationship, losing the trust and perhaps determination of our most important allies in what could be called the therapeutic journey. We have indeed, gradually been dismissing the subjectivity and priorities of the person that stands in front of us.

In the past decades, the conventional biomedical model has slowly lost its popularity in medical practice to give some margin to a few new mindsets. It appeared as an urge for an alternative current, emerging in order to overturn the situation and to avoid the direction we were slowly heading towards.

We decided to focus on one particular current: The Patient-Centered Medicine (PCM)[2,3].

This recently new, wider approach is based on a switch in values meant to include the patient's experiences and expectations while still englobing evidence-based medicine and without abandoning the theoretical and technical competences of the clinician.[1]

Although still occurring, this transition is due to the conclusion that, nowadays, most of the illnesses we know are considered multifactorial[2]. Hence, we should not only look at the trigger, but also take a closer look at the whole self-organized system that is the human being, who is the receptor to this trigger and as a consequence, will be creating a specific response to it. From this stimulus to the reaction, the information received will be processed very differently[1] from one person to another according to its inner mechanisms, its degree of vulnerability and its sense of safety[2]. This is why all of these potential aspects should be considered by the physician as they all play an important role in the origin of the illness.

The medical fields where the actual illness-orientated model seems to be more contestable are the ones where we find ourselves at the crossroads of two complementary polarities, and where the mind and the body should be explored together. General Practice[2,4] and Psychiatry[2] both seem to be struggling with and suffering from this detached conventional model, as doctors have long been taught to keep a distance from their patient's feelings and emotions[2]. In the 50's, Michael Balint introduced new terms to describe this dualistic approach after understanding the struggle doctors had at dealing with the baggage of additional information each patient brought to the encounter, highlighting the importance and necessity for the physician's personal emotional development[2,4] in order to associate and connect with the patient.

A better comprehension of the complexity of the human being and the increasing need for preventive measures in health care have led to several changes in physicians' behavior.
Even if the definition of patient-centered medicine remains non-consensual[1,3,4] across most of the existing literature, the majority of definitions agree on several components that gathered together, form a sort of more complete biopsychosocial model, viewing the patient and its surrounding context as a whole. These interacting dimensions, highlight the uniqueness of each patient and lead us to the uniqueness of each encounter[2].

In order to take advantage of the new technologies available and to follow the path of progress in a productive way, we should not forget that we need the patient to be on our side. Therefore, it is crucial that we have the patient's acceptance motivation and cooperation.

Many studies demonstrate that by paying more attention to patients' expressed concerns, needs and increasing curiosity about their own condition[1,2] we can reach a much more efficient and sustainable result. It is necessary to understand the patient's perception about their health and about their illness and how it affects the way they function on a daily-basis.[2]

Ideas such as empowering the patient by abdicating of the paternalistic way of performing, starting to use the shared-decision making method[1,2,4] and enhancing the sense of partnership, as well as taking into account the patient's social and cultural beliefs have proven to strengthen the relationship between patient and physician, a fundamental aspect for satisfactory results when it comes to patients' compliance[4]. As several studies have shown, we can observe many benefits and a positive impact on patients' health outcomes when there is a deeper empathic involvement from the physician's side. By renouncing to the need to control and by promoting collaboration and encouraging the patients to share their ideas, we can hope for a more symmetrical doctor-patient relationship[4], although it is still unclear to which level this can be enforced.

Studies have also proven that by implementing this mutual participation process we can actually alleviate the care costs and reduced the amount of solicited complementary tests.

There are a few **key concepts**[2] , we shall refer to as components, described by Moira Stewart *et al*, all of them interrelated and that can be used to define the patient-centered model:

Component 1: *Exploring health, disease and the illness experience* (perceptions and experiences of health, illness and disease, feelings and ideas of the illness, effects on the function, expectations).

Component 2: *Understanding the whole person* (person and life history and development, proximal- family, employment, and social support; and distal contexts – culture, community, ecosystem).

Component 3: *Finding common ground* (problem and priorities, goals of treatment and management, roles of patient and doctor).

Component 4: *Enhancing the patient-clinician relationship* (empathy, power, healing and hope, self-awareness, transference and countertransference).

In a period of time where chronic diseases are increasingly present in our societies, we should also regard the patient as a long-term responsibility and consequently, the approach should be as sustainable as possible. We should also bear in mind that PCM is a slow process to establish, as it takes time to reach a level of mutual trust, but it is an essential one.

Considering the valuable results of this method, it has slowly been integrated in the medical education curriculum and has been the focal point of several scientific studies.

In Portugal, many investigations in medical centers have taken place and the results sustain the theory of a positive correlation between PCM and enablement[5], evidencing a better chain reaction and more favorable repercussion on health. Obviously, this doesn't come without associated restrictions, as prolonging the time of each appointment brings social and economic risks and consequences[6], accompanied by uncertain satisfaction[1,7] from the patients, as patients'

needs and outlook might differ according to what brought them to the doctor[1] and to the time they are willing to spend there. Because patients have their particular requirements and because their preferences[1] for clinical style diverge significantly, it makes it challenging to always meet their expectations[4]. Accordingly, it would be wise to find the right balance in order to be able to both decrease the costs associated with long appointments, as well as taking the amount of time needed to elicit patient's views and thus, to reduce future unnecessary consulting[6].

Moreover, what is also still unclear is how medical students and young residents perceive this more integrative model and their capacity to apply it in their future or daily routine.

We have therefore decided to conduct a survey in the central region of Portugal, targeting this group of apprentices of general medicine.

We believe that constant changes in the society should be followed by appropriate changes in medical education, with communication skills[1] and empathy be reinforced as our intention is to narrow the gap between the physician's and the patient's viewpoint.

The goal of this study is to validate a self-assessment scale to measure the usage of PCM in this region, as we are interested to know how well this method is being incorporated in our medical education and later on, put into practice.

Material and Methods

Once the vote in favor of consent was given by the ethics committee in January 2018, we carried out with the construction and validation of a scale to measure health professionals self-perceived degree of Patient-Centered Medicine.

The creation of the scale followed the components[2] and structure suggested by Moira Stewart *et al*, after getting direct authorization to do so.

The elaboration of this questionnaire started from the initiative of 4 authors, Luiz Miguel Santiago, José Augusto Simões, Inês Rosendo e Martinha Vale, who set the compilation of

questions guided by the reference book[2], in which sentences were formulated in order to stay true to each chapter, corresponding to each component.

The existence of previous work completed corresponding to this topic[4,8] was taken into account, more specifically an earlier study[5] based on the, initially 6 components, approach of Moira Stewart *et al.* In this former investigation, the patients' perspective on whether or not they felt the impact of Patient-Centered Medicine was studied, the consulters 'opinion and awareness being important to this new research.

Subsequently, a focus group composed by several invited physicians of both gender and of a wide range of ages and career experience was created, some of which were trainers or teachers in the field of Family and General Practice.

The final panel was formed by Ana Paula Cordeiro, Teresa Pascoal, Sara Cantarinho, Albino Miguel Pereira, Teresa de Santis, Arlindo Santos and António Vidinha.

On September the 8th of 2016, a meeting about PCM took place in the headquarters of the Central-region Medical Association from 21h to 22h30 and was video-recorded under unanimous consent of all the participants.

Following the presentation of the topic and its framework, critics and suggestion were solicited for the drawing process of this questionnaire and the present members were called to contest or discuss each chapter in order to clarify any apprehension and set aside possible remaining doubts.

After this gathering, another confirmation was organized electronically for a more general semantic review. A last inspection was posteriorly done by an expert in Portuguese Linguistics, Ana Cristina Macário Lopes, Professor at the Faculty of Literature at the University of Coimbra[1].

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[1] FLUC: Faculdade de Letras da Universidade de Coimbra

Once constructed and after verifying the internal consistency and defining the reliability of this instrument, we needed to apply it on the population to try to understand how Patient-Centered Medicine is being instituted in Portugal, especially targeting the Family and General Practice sector. We so proceeded, with the help of the center of coordination of internships of the Central-Region[2] and with informed consent of all the selected health professionals.

An amount of 515 questionnaires were sent electronically by email to the young medical practitioners and older professionals of the Central-region of Portugal for them to fill out.

This scale of 22 questions that can be found in annex, was divided into 4 subgroups, corresponding to the four components abovementioned defining the PCM model[2] (that is: 8 questions related with component nº1: *Exploring health, disease and the illness experience*, 3 questions corresponding to component nº2: *Understanding the whole person*, 6 questions associated to component nº3 : *Finding common ground* and finally, 5 questions referring to component nº4: *Enhancing the patient-clinician relationship*).

The PCM questionnaire had four levels of answer to every question marked as 1 for "Almost always", 2 for "Many times", 3 for "A few times" and 4 for "Scarcely". The lower the score, the better.

6 additional questions, recruiting extra information on gender, workplace, year of residency and whether or not the physicians had received training about the PCM field were also included at the beginning of this survey.

General Practice within the National Health Service can be performed in Family Health Units (USF), depending on a contract to fulfill agreed indicators of activity so having autonomy of internal organization, or in traditional Primary Health Care Units (UCSP), with no autonomy of organization.

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[2] Coordenação de Internato da Região Centro

The poll contained questions that tried to contemplate to which extent professionals self-perceived their practice to be patient-centered. Questions examining the space and time given to the patient to express their concerns, fears and possible reluctance were included. Other questions explored how deeply the patient's motive for seeking medical advice was considered.

We investigated if the patient's expectations and life impact mattered to the practitioners and how much these practitioners understood their own emotional intelligence. Trying to understand if the physician digs and evaluates the surrounding context of the patient, its position in and commitment to the society, its beliefs and the attempt to conciliate and to find a common ground according to all these factors. The questions also evaluate the doctor's need to understand the patient's perspectives and understanding of its health's state. The goal was to define how intimately related are the results with the several variables and to validate a scale of self-perception of their PCM practice.

The statistical analysis was proceeded using SPSS Software and after confirming the normality of the data distribution ($P > 0,05$) by using the Kolmogorov-Smirnov test, we started using parametric tests, namely the student's T-test for mean' comparisons. We then used nonparametric tests such as Kruskal Willis and the Mann–Whitney U test.

Results

Out of 515 sent surveys, we managed to gather an amount of 120 anonymously filled ones, out of which 99 (82,5%) were fully answered.

Our sample which consisted of 94 medical residents was mainly composed of the female gender, 73 women (78%) and 21 men (22%). Out of these 94 professionals, 66 (29,8%) worked in Family Health Units (USF[3]) and 28 (70,2%) work in Primary Health Care Units (UCSP[4]).

When asked for any attendance of any type of specific training on Patient-Centered Medicine, 24 (25,5%) interns responded positively, while the other 70 (74,5%) denied such a background in their career education.

When the same question was asked, but more specifically about training on consultation on PCM, again only 24 (25,5%) internees affirmed having been through this kind of training.

Most of the physicians, 72 (76,6%), seem to believe they are practicing PCM in their everyday medical appointments, only one trainee (1,1%) believed that he or she was not introducing this method in their everyday routine.

The Cronbach's alfa was of 0,749 and the overall numeric results for the four components are shown in the table 1. It is to be noticed that the worst result is for "Understanding the whole person" followed by "Exploring health, disease and the illness experience".

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[3] USF: Unidade Saúde Familiar
[4] UCSP: Unidade de Cuidados de Saúde Personalizados

Table 1: Descriptive values of components

	Component 1: Exploring health, disease and the illness experience Best = 8	Component 2: Understanding the whole person Best = 3	Component 3: Finding common ground Best = 6	Component 4: Enhancing the patient-clinician relationship Best = 6
Minimum	8	3	6	6
Maximum	24	11	17	15
Mean±sd	15,39±3,44	6,82±1,88	10,99±2,61	8,19±2,27
95% ic	14,69-16,08	6,44-7,20	10,46-11,52	7,73-8,65
Max/Mean	0,52	0,44	0,55	O,73

Table 2: Global statistics according to the different variables for the 4 components

		Exploring health, disease and the illness experience Best=8		Understanding the whole person Best=3		Finding common ground Best=6		Enhancing the patient-clinician relationship Best=6	
		Mean + Sd	P	Mean + Sd	P	Mean + Sd	P	Mean + Sd	P
Male		15,29 + 2,74	0,860	7,48 + 1,54	0,089	11,24 + 1,84	0,488	7,81 + 2,20	0,358
Female		15,44 + 3,67		6,69 + 1,94		10,88 + 2,79		8,33 + 2,29	
UCSP		15,36 + 4,00	0,959	6,64 + 1,85	0,550	10,96 + 2,47	0,952	8,21 + 2,28	0,941
USF		15,40 + 3,22		6,90 + 1,90		11,00 + 2,68		8,18 + 2,28	
Specific Training on Person-Centered Medicine	Yes	16,08 + 3,44	0,182	7,00 + 2,02	0,538	11,68 + 2,46	0,092	8,72 + 2,59	0,177
	No	15,03 + 3,33		6,73 + 1,83		10,67 + 2,57		8,00 + 2,15	
Specific Training in consultation on Patient-Centered Medicine	Yes	16,04 + 3,36	0,272	7,12 + 1,88	0,361	11,60 + 2,53	0,175	8,88 + 2,33	0,076
	No	15,16 + 3,47		6,72 + 1,88		10,78 + 2,60		7,94 + 2,21	

No differences were found when analyzing the four components by sex, kind of primary care health unit, Specific Training on Person-Centered Medicine or Specific Training in consultation on Patient-Centered Medicine.

When interpreting the results for the variable "Believing practicing PCM" with the Kruskal Wallis test, as this one was a 3-answers question ("yes", "no", "no answer"), a significant difference was found for the component "Understanding the whole person" (p=0,020).

Table 3: Analysis of the components by the variable "Believing to practice PCM"

	Exploring health, disease and the illness experience	Understanding the whole person	Finding common ground	Enhancing the patient-clinician relationship
2 tailled p	0,286	**0,020**	0,178	0,392

(Kruskal Wallis Test)

After this result, we took a deeper look at this component and analyzed the scores for this second component according to if they believed or not applying PCM,

As it is, those who believe to practice PCM have a significant better result (lowest scores from 3 to 6) than those who don't believe it or didn't answer (mostly scored around 7 and above).

Table 4: Cross-tab "Understanding the whole person" * Believing to practice PCM"

	Score		Believes to practice PCM		
			Yes n (%)	No n (%)	No answer n (%)
	3	N (%)	4 (5,4)	0 (0)	0 (0)
	4	N (%)	7 (9,5)	0 (0)	1 (4,8)
Component 2:	5	N (%)	9 (12,2)	0 (0)	1 (4,8)
Understanding the whole person	6	N (%)	18 (24,3)	0 (0)	3 (14,3)
	7	N (%)	15 (20,3)	0 (0)	4 (19)
	8	N (%)	0 (12,2)	0 (0)	3 (14,3)

9	N (%)	6 (8,1)	1 (100)	8 (38,1)	
10	N (%)	5 (6,8)	0 (0)	1 (4,8)	
11	N (%)	1 (1,4)	0 (0)	0 (0)	
Total	N (%)	74 (100)	1 (100)	21 (100)	96 (100)

Moreover, we explored more profoundly the rest of the answers to see which features of the scale had the most unsatisfying results regarding each constituent subscale.

For component 1, *Exploring health, disease and the illness experience*, the questions that had the worse results as they were only asked "few times" or "scarcely" where questions such as "asking the patient about the consultation's expectation" and "inquiring if the patient had any perspective on having a disease".

For component 2, *Understanding the whole person,* the aspect with more disappointing results was the lack of information on the patient's level of integration inside his own community, by not keeping an updated idea of its regular activities and other occupational involvement (cultural, political, volunteering etc.). The other two questions related to this second component also seemed to be less popular among young interns as patients' relationship with their family members, living conditions and actual income were left as the last of priorities during the consultation. Interests and aspirations, labor and extra-working activities, as well as religious beliefs of the consulter were also rarely mentioned according to the doctors themselves.

For Component 3: *Finding common ground,* the aspects that seem to need some improvement are the elaboration of a list of problems and defining together with the patients the priorities that need to be solved. As involving the patients in the process of decision, showing them trust and giving them some sort of responsibility and opportunity to provide their own viewpoint is a key to therapeutic success and many physicians admit not doing it often.

For Component 4: *Enhancing the patient-clinician relationship,* most of the interns answered "Almost Always" and "Many Times" without many disparities between questions. We couldn't

attribute any importance to any specific question here, as most of the points seem to be more or less put into practice. Nevertheless, we could point out that "trying to make the encounter last the time necessary" doesn't happen in most of the circumstances as reported by the doctors when answering the question.

When analyzing the distribution of the results of the components by year of internship we found no difference, meaning that throughout the residency no gain was achieved, with respectively p=0,968, p= 0,685, p=0,947 and p=0,503 by component, using the Kruskal Wallis test.

Discussion and Conclusion

What we realized in this survey is the presence of homogeneity in the responses between the residents that state to have been in contact with and received training on PCM and the ones that haven't. This was rather an unexpected aftermath since we would expect that people who had some knowledge or contact would score significantly higher.

Also, we acknowledged that the worst results were for "Understanding the whole person" followed by "Exploring health, disease and the illness experience", revealing the need to better introduce young doctors to these issues.

While confronting these results, not forgetting the fact that our sample was mainly composed of young doctors still at the beginning of their professional career, we cannot exclude the possibility that in the past decades, as medical education has suffered many modifications when it comes to the academic programs, perhaps some of these basic components are not yet fully incorporated by medicine students, even if more present than before.

We can also observe that a large number of professionals consider to properly apply PCM (77,3%) while only a very small percentage (±26,0%) of them has actually had some specific training on the topic.

This is an interesting result and it could highlight the fact that professionals might feel comfortable enough with their knowledge to affirm with conviction that they apply it to their medical encounters. It is long known that a considerable number of doctors have perfectionist personality traits. They might simply believe to know how and in they in their ability to practice PCM as a consequence of assuming they do their best in other fields.

Another curious aspect is the fact that out of the 4 dimensions, one of them outstands itself for the low punctuation it got. In fact, the second component "understanding the patient as a whole" showed a significant difference when analyzing the question "Believing applying PCM", proving to be the less covered aspect during the consultation.

We could ask why such an important number of interns decided not to respond to this question and only one admitted not to apply PCM. This might suggest uncertainty about whether their practice is in fact patient-focused or not. Is it because they are still at the beginning of their career and therefore feel too insecure to affirm it yet? Is it because they are not sure they understand the concept? Or is it because they are aware of the fact they don't practice it and wouldn't admit it? This last option, cannot be attributed to a lack of time of training because the last component is extremely well answered.

We could try to figure out what is the reason behind the lack of answers for this question. As the second component involves a wide spectrum of characteristics such as the life history and development of the patient, its proximal contexts such as family, employment, and social support and distal contexts such as culture, community and the ecosystem, we could try to understand why this dimension is the most challenging to deal with and find more directed solutions. In cases of linguistic and cultural barriers for example, we could also search for and include more specific training with the help of translators and intercultural mediators among other non-medical professionals.

Despite the lack of concrete results and no other detection of real disparities between our different variables, this tool is interesting to use and can be even more useful in future studies to identify when understanding how specific training could increase better knowledge about PCM. As society develops, so does the medical practice and the use of patient-centered attitudes. As an extension of this study we can try to find the ingredients to develop a more sophisticated and adequate educational program by working on and adjusting the failing elements found with the help of this questionnaire.

Some studies have also shown that the decrease in empathy through the course of medical school is a common phenomenon, found worldwide among medical students. Some researchers point out the benefits of self-consciousness of professionals on their way of practicing medicine. Building the capacity of awareness might help detect changing harmful conditions that might affect the quality of the encounter. It might also lead to a more attentive state when it comes to self-preservation, helping to avoid stressful situations that could influence the mood of the interaction and maintain comfortable working conditions and relationships.

A fifth component not mentioned before is being taken into account here, that some might affirm being as fundamental as the other components to practice PCM: The doctor-as-a-person[4,8]. This dimension has often been associated to the 3rd dimension, where sharing responsibility is described as a dual process, both physician and patient sharing space and power and so has been excluded many times for its ambiguity and complex role in the doctor-patient relationship.[4] Regardless of this, it may be interesting to try to conceive how much the physicians themselves feel about or could benefit from this self-reflection scale and from the PCM approach in a near future.

It is important to remember that Patient-Centered Medicine should never be considered a rigid method nor should it include specific standardized procedures and established interviews. On

the other hand, even admitting that the relationship between professional and consulter is a mutual responsibility, the doctor plays an important role, as he needs the required skills "in order to achieve and develop the desired emotional context in consultation"[4]. This is what distinguishes the general practice from more specialized medicine, as in these more intimate contexts, the limitations of the biomedical model have been felt to a bigger extend. That is why we need to be properly trained, flexible prepared health professionals, that recognize the unconscious and inner mechanisms of transference and counter-transference[2] and how to handle them, being able to respond and adjust to the patients 'needs. Unfortunately, some of these concepts are still not discussed enough in medical schools.

This scale is an attempt to quantify the quality of the care professionals believe they are delivering to their patients by studying specific domains of the PCM. Attending to the own subjective rating of each doctor about their personal aptitudes, perhaps other studies including external observation of these young physicians through their consultation might be necessary to reinforce and to confirm the preciseness and validity of such a scale. The greatest interest of this study being the link between self-assessment and the actual behavior of these physicians, causes these results to still be unclear for their purpose.

Although very feasible, and relatively easy to administer, as it can be applied to a more extensive sample, it is well known that self-report measures rely on theoretical concepts that can diverge from one social and cultural context to another.[4] The distinct conceptualizations of Patient-Centered Medicine and of good medical practice in general whether across the globe, within the same country or even between co-workers might skew the statistics.

This scale, not being too time-consuming and clearly evaluating global consultation skills, is a good benchmarking tool to identify weaknesses and improve oneself in the medical area of expertise. It makes it therefore an accessible choice if we want to use it in routine monitoring but could still be updated by further advances in investigation.

Further studies must be conducted to try to compare the results found amid the interns with older generations of more experienced-doctors to find out how much the training or new educational programs do in fact affect medical practice and whether they are or not associated with positive results and outcomes.

We could also try to use it associated with a patient's self-assessment scale on PCM and compare to see if the results of these two instruments are incongruous or not when evaluating the consultation.

That could reinforce the reached conclusions as we would then have access to both crucial perspectives.

Due to the complexity of medical interactions, Patient-Centered Medicine still has a lot of challenges to face, its main pursuit still continues to be the improvement of the consultation outcomes by seeking the patient's satisfaction, patient's compliance and the health status of the individual.

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Bibliography

1.   Bensing J. Bridging the gap: The separate worlds of evidence-based medicine and patient-centered medicine. Patient Educ Couns. 2000;39(1):17–25.

2.   Stewart M [et al]. Patient-Centered Medicine Transforming the Clinical Method. Third Edit. New York: CRC Press; 2014. 426 p.

3.   Scholl I, Zill JM, Härter M, Dirmaier J. An Integrative Model of Patient-Centeredness – A Systematic Review and Concept Analysis. PLoS One [Internet]. 2014;9(9):e107828. Available from: http://dx.plos.org/10.1371/journal.pone.0107828

4.   Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. Soc Sci Med [Internet]. 2000;51(7):1087–110. Available from: http://www.sciencedirect.com/science/article/pii/S0277953600000988

5.   Reis AF, Santiago LM, Botas P. Medicina Centrada no Paciente e Capacitação do Consulente em Medicina Geral e Familiar. Rev ADSO [Internet]. 2015;5(5):19–32. Available from: http://adso.com.pt/revadso/article/view/30/pdf_8

6.   McLean M, Armstrong D. Eliciting patients' concerns: A randomised controlled trial of different approaches by the doctor. Br J Gen Pract. 2004;54(506):663–6.

7.   McKinstry B, Colthart I, Walker J. Can doctors predict patients' satisfaction and enablement? A cross-sectional observational study. Fam Pract. 2006;23(2):240–5.

8.   Kjeldmand D, Holmström I, Rosenqvist U. How patient-centred am I?. A new method to measure physicians' patient-centredness. Patient Educ Couns. 2006;62(1):31–7.

Original questionnaire in Portuguese

Solicitamos a resposta a todos os campos abaixo:

Sexo: Feminino☐   Masculino ☐

Grupo etário: ≤ 35 anos ☐   ≥36 e ≤ 55 anos ☐   ≥ 56 anos ☐

Local de trabalho: UCSP ☐   USF ☐

Frequência de formação específica sobre Medicina Centrada na Pessoa: Sim ☐   Não ☐

Frequência de formação específica sobre consulta em Medicina Centrada na Pessoa:

Sim ☐   Não ☐

Julga praticar MCP: Sim ☐   Não ☐   Não sabe / Não responde ☐

Nas consultas de Medicina Geral e Familiar **agendadas pela pessoa, costumo:**	**Resposta**			
Deixar falar inicialmente a pessoa, sem interrupção, sobre os sinais e sintomas que motivam a sua vinda à consulta.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Pedir que fale sobre os seus receios e ideias acerca do que tem.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Perguntar sobre as suas expetativas acerca do resultado da consulta.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Questionar como é que os seus problemas influenciam a sua vida diária, física e/ou emocionalmente.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Inquirir sobre a sua perspetiva de ter uma doença.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Saber qual a sua perceção sobre o seu estado geral de saúde.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Analisar a sua comunicação verbal e não-verbal.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Realizar exame físico e/ou analítico acerca das queixas.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Manter atualizado o conhecimento sobre a pessoa (formação, atividades laborais e extralaborais), religiosidade, pontos de interesse, rendimentos e aspirações.	Quase sempre	Muitas vezes	Poucas vezes	Raramente

Manter atualizado o conhecimento sobre a sua família (relações familiares, condições de habitação e rendimentos).	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Manter atualizado o conhecimento sobre a sua ligação à sociedade (voluntariado, cultura e política).	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Elaborar com a pessoa a lista de problemas da consulta.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Definir em conjunto as prioridades a resolver.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Explicar o processo de tratamento que será realizado em conjunto e colaboração.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Verificar se a pessoa percebeu e aceita os objetivos a atingir.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Inquirir se percebeu o que deve ser feito para evitar que piore.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Verificar se percebeu a importância de cumprir as indicações para que se obtenham de resultados positivos-	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Observar os princípios da empatia médica tendo compaixão pela pessoa.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Tentar que a consulta dure o tempo necessário.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Transmitir confiança nos meus conhecimentos e atitudes.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Dar espaço e responder às dúvidas colocadas.	Quase sempre	Muitas vezes	Poucas vezes	Raramente
Dar a entender à pessoa que a entendeu na sua globalidade (corpo e mente).	Quase sempre	Muitas vezes	Poucas vezes	Raramente