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Use of qualitative methods to optimize collaborative practices by highlighting differences in perceptions between professionals. Example of patient education.

ABSTRACT

Interprofessional working must be approached within health promotion interventions using systematic methods to identify area of suboptimal collaborations. Thus, we designed a qualitative study with a purposive sample of seven French therapeutic patient education programs. Semi-structured individual interviews were conducted with 14 healthcare providers and seven clinician leaders (coordinators) involved in patient education. We used the same interview guide and thematic grid regardless of the professional's profile to compare their perceptions on elements affecting outcome, participation and sustainability of programs. Healthcare providers and coordinators addressed non-convergent issues at both ends of a continuum from a micro-level nested in the program delivery to a macro-level corresponding to the structured implementation and sustainability of the program. Meso-level issues featured convergent perspectives. Our methodology could be used at the level of health services in a health system to provide a complete recovery of stakeholders' perspectives (without "blind spots" from one stakeholder or another). In our study, we focused on patient education in the French health system and pointed out possible considerations to optimize the functioning of programs. Such considerations include specific training plan development, encouraging reflection on the content and use of initial assessment, leading sessions in pairs to save on work time, and communication on the ins and outs of organizational imperatives that require healthcare providers' contributions. The perspective of this approach is to inform future perspectives on interprofessional education to improve collaboration.

KEYWORDS

Therapeutic patient education, Qualitative methods, Comparison of perception, Collaborative practices, Health services outcomes

Introduction

In 1998, the World Health Organization described therapeutic patient education (TPE) as “educational activities essential to the management of pathological conditions, managed by healthcare providers, duly trained in the education of patients and designed to help a patient (or a group of patients and their families) to manage their treatment and prevent avoidable complications, while keeping or improving their quality of life”(WHO, 1998). TPE covers organized activities designed to make patients fully aware of their disease and to inform them about care, hospital organization and procedures as well as health- and disease-related behaviours (HAS, 2017). TPE can be a way to cope with change in self-identity and to plan, pace and prioritize (Kralik et al., 2004). Educational activities can include interventions based on health education, promotion of medical adherence, illness-related problems in everyday life, promotion of physical activities, psychological support and social counselling (see for example, Meng et al. (Meng et al., 2016)). Several meta-analyses showed that TPE interventions are beneficial for patients, but they are rarely described in detail (Attridge et al., 2014; Conn et al., 2008; Ellis et al., 2004; Lagger et al., 2010; Stenberg et al., 2016, 2019); however, a description of the intervention is essential to understand its mechanisms and to explain the obtained results.

This study was part of the Classification of Patient Therapeutic Education Programs Components (CONCERTO) project with the objective to identify the institutional, organizational, pedagogical, psychosocial and medical element components of a patient education program affecting outcome, participation and sustainability of the program through qualitative investigation (ClinicalTrials.gov Identifier: NCT02717182). The perspective of the CONCERTO project is to provide a tool to better report TPE in research publications with the hypothesis that better insight may help HCPs to develop effective intervention within a health system.

To achieve this objective, perspectives of both healthcare providers (HCPs) and TPE coordinators are important to consider. The formers are responsible for patient education, and TPE coordinators play a pivotal role consisting of team management, driving the dynamics of the program (patient recruitment, program evolution), and defending the program to funders.

Theory

TPE relies on strong interprofessional work. Along with management skills, interprofessional collaborations must be approached within TPE interventions. Results from a metasynthesis of Canadian interventions in delivering care to community-dwelling seniors showed that interprofessional teams work collaboratively when trust and respect, communication, and shared vision are present (Johnson et al., 2021). In a case-based session focusing on an interprofessional clinical challenge from five different health professions (medicine, nursing, nutrition, pharmacy, social work), participants consistently stated that the presence of and interaction with other health professional trainees were among the most valuable aspects of this experience (Kesselheim et al., 2019). Moreover, in a longitudinal survey, patients took part in a 3-week rehabilitation process led by an interprofessional team comprising a physician, occupational therapist, physical therapist, nurse and other relevant team members. The communication and relationship in teams, as reported by the professionals positively affected patients' perception of health and disability (Hustoft et al., 2019).

The Assessment of Interprofessional Team Collaboration Scale was developed and then revised to help HCPs assess team functioning and collaboration within a team (C. Orchard et al., 2018; C. A. Orchard et al., 2012). The instrument aims to determine whether professionals perceive collaboration at the level of team functioning. To the best of our knowledge, no study has used an applied method to identify suboptimal collaborative practices.

Research question

During the qualitative investigations of the CONCErTO project, various levels of analysis appeared, ranging from the micro level (relative to HPCs' individual characteristics), meso level (relative to the program organization) to macro level (relative to integration of the program in the health system) (Jaspal et al., 2016). However, whereas the same interview guide structure was kept for TPE coordinators and for HCPs), participants did not always address the same levels of analysis.

Knowing other professionals' role view is a fundamental determinant of the interprofessional collaboration (Spaulding et al., 2021). We thus proposed an original use of qualitative methods to identify precise areas where knowing each other role could be improved in the dimension of health services (integrated in a health system). In this perspective, we compared the perception of TPE coordinators and HCPs in the framework of the CONCErTO project (identification of factors affecting the outcome, participation in and sustainability of TPE).

Method

Study setting

We conducted semi-structured individual interviews with TPE coordinators and HCPs involved in TPE programs. The present study complied with the COREQ criteria (Tong et al., 2007).

Study design and population

Program selection

Sample heterogeneity is essential to capture comprehensive and diverse data in depth. To construct a maximum variation sampling, we identified three key dimensions of variations in programs (Suri, 2011): diseases, hospital or non-hospital programs, and urban or rural programs. We chose 12 of the Lorraine regional health agency-authorized programs plus two programs outside the region.

The list from the regional health agencies included the name and contact information of the program TPE coordinator (public data). Agreement to participate was obtained from the TPE coordinators after informing them of the objectives and process of the CONCErTO project. No coordinator refused the study. For the 14 included programs in the CONCErTO project, seven involved interviews with both clinician TPE coordinators and at least one HCP. For six programs, TPE coordinators were not available for data collection, and for one program, coordinators were changing during data collection.

Description of the seven programs of the current study:

1. Six were located in Lorraine (Grand Est Region) and one in Grenoble (Auvergne Rhone Alpes Region)
2. Hospital programs (n = 5), non-hospital programs (n = 2)
3. Urban programs (n = 4), rural programs (n = 3)

Participants

An experienced female health PhD psychologist () and an experienced female PhD sociologist () collected data from April 2016 to November 2021 where programs took place. No one else was present besides the participant and the researcher during the interview.

We interviewed all HCPs involved in each program who were present on the day of the interview. We also interviewed the TPE coordinator if available. The researchers did not have any relationship with participants before the study start. All professionals agreed to participate after a short presentation of the CONCErTO project. Interviews lasted about one hour. Interviews were integrally audio-recorded and transcribed.

Data collection

During three meetings, an interview guide was designed with a clinician/epidemiologist (also coordinator of a TPE program), a psychologist and a sociologist (also coordinator of a transversal TPE unit of a teaching hospital). The key research questions for discussion were to describe the TPE practices and identify elements that may affect the outcome, participation and sustainability of the intervention.

Probing questions for in-depth exploration were organized on the basis of May's normalization process theory (May et al., 2007) at three levels: macro (institutional elements), meso (elements linked to the TPE organization), and micro (elements linked to the patient and the HCP–patient relationship). We defined probing questions to identify participants' perception of TPE (see Table 1) and to investigate the institutional (macro), organizational (meso) and pedagogical, medical and psychosocial (micro) components of a TPE program affecting outcomes such as participation and sustainability of the program. The key aim was to encourage participants to speak freely about factors of TPE success or difficulty. The guide kept the same structure regardless of the participant's profile (TPE coordinator or HCP).

We collected demographic information relating to participants (i.e., profession, age class and number of years of experience in TPE).

Analysis

We followed a general inductive approach (Thomas, 2006) to identify themes from the participant discourse to properly capture their perception. After a careful and open reading of transcriptions, themes were identified for thematic analysis. First a health psychologist () read the three first HCP interviews and proposed a first draft of a coding grid. Next, based on two other interviews, the grid was refined and tested during a meeting with a sociologist () and a clinician/epidemiologist (). A document specifying the content of the themes (elements to be included/excluded in each theme) was created and revised progressively to stabilize the coding grid. All themes and subthemes were defined and discussed during the meeting to triangulate the perspectives of psychology, sociology, and clinical and public health. In this type of triangulation, researchers provide different insights for a deeper and broader understanding of findings (Carter et al., 2014). We used the same themes for TPE coordinators.

() and () are experts in qualitative research, () is also a coordinator of a TPE program and () is also a coordinator of a transversal TPE unit of a teaching hospital. The variety of expertise ensured rich data interpretation (Anrys et al., 2019). () was trained in the coding grid. () and () double-coded six interviews from HCPs and two interviews from TPE coordinator. All coding disagreements between the two coders were resolved by discussion. In case of persistent disagreement, resolution was obtained by discussion with a third researcher (). Then we measured the level of agreement between the two coders by using Cohen's kappa coefficient. This calculation provided an overview of the process of achieving coder consensus (McDonald et al., 2019). After reaching a 0.89 kappa value for HCPs and TPE coordinators, () encoded the remaining data. Throughout the coding process, the whole team regularly discussed difficulties and queries.

The recruitment process ended after data saturation, that is, sufficient data to report on all aspects of the phenomenon (Morse, 1995; Morse et al., 2008). Data saturation is achieved when concepts and sub-concepts cannot be further specified with additional data. Data analysis involved using NVivo v11.

These analysed data derived from interviews conducted in the programs for which we have the perspectives of both TPE coordinators and HCPs.

Ethical considerations

The Comité de Réflexion Ethique XX Hospitalo-Universitaire (XX), Dec. 10, 2015 approved the protocol. All participants gave their written and oral consent.

Findings

Besides showing variation in program characteristics (see “Program selection”), Table 2 shows that sampling also varied: for five programs, sessions were delivered in groups; for one program, one-to-one; and for one program, both. We also observed a large diversity of profiles concerning the participants in terms of profession, sex, age group and experience.

The aim of the CONCErTO project was to identify the factors associated with institutional, organizational, pedagogical, psychosocial and medical elements of TPE affecting the outcome, participation and sustainability of a program. With this scope, we extracted five main themes from the data: 1) HCP characteristics, 2) session management, 3) patient characteristics, 4) team life, and 5) TPE program characteristics. For each of these main themes, we analyzed the perspective of TPE coordinators and HCPs. TPE coordinators more frequently addressed some dimensions and HCPs more frequently others.

Factors linked to HCP characteristics

Expertise on the related disease of the TPE program

HCPs expressed the need to have precise and up-to-date knowledge about the disease, whereas TPE coordinators did not evoke this aspect as a need for HCPs.

It is necessary to know the disease in order to make them understand what is necessary. (HCP 6)

Today the media circulate a lot of information and patients come with their request (...). We have to be able to either give them the information if we know it immediately or answer their questions quickly. We're not supposed to know everything, but we have to try to answer. To have this educational posture until the end. That's what's important, I think we really need to get up to speed. (HCP 14)

HCP training in TPE

HCPs always viewed specific training in general TPE practice as very important. The members of two programs underlined the idea of using these training times for the benefit of the whole team.

Three people per year do the level one proposed by (...) for the 40 hours training. So when they leave for the training, they come back with a small project; often it concerns a workshop. It's going to be an idea to improve the program, to refine it, to evaluate it.
(TPE coordinator 2)

We have to do a dissertation and it's very important. We all tried to do something; anyway, that's kind of the point of the game: something that brings for the entire group.
And the first nurse who did it, her initiative was to make a notebook. (HCP 10)

Factors linked to session management

Patients' initial assessment

The coordinators never discussed the content of initial assessment, but it was a major element forming HCPs' discourse. Aspects addressed during the initial assessment went far beyond the strict framework of the disease, its treatments, health practices or comorbidities to integrate psychological, social, economic or daily life aspects (e.g., dealing with elevators, domestic animals, and working hours). These collected elements led to the orientation of the future educational intervention for a particular patient.

(...) [first] on the patient's life habits, then the general perception of the pathology, treatments in general, and we work a little on the patient's motivation (...). In the second part, I give an order of priority on the objectives to be reached. (HCP 11)

So for HCPs, the initial assessment is the basis upon which their intervention can be built and this is not necessarily perceived by TPE coordinators.

Patient–HCP relationship

The two groups viewed the patient–HCP relationship as clearly different and deeper in TPE than in usual interactions.

Managing group sessions

Among the seven included programs, one program proposed individual sessions along with group sessions. One program included only individual sessions. Therefore, except for one HCP, all the others were at one time or another exposed to group management.

HCPs raised some difficulties in this exercise and the skills needed for it, for example, to give a voice to all participants, manage personal talks, move away from criticism and a negative atmosphere, and manage heterogeneity in the group composition:

It's heterogeneous, it's up to us to get everyone to talk because there is always a leader with (...) knowledge and the shy person who waits, but generally there are good exchanges. (HCP 4)

There was a lady who was refractory to all treatments and I don't think she was ready to enter in the education program; we didn't realize it and it really disrupted the session. (HCP 10)

TPE can work less well especially if a patient expresses a problem in a rather negative way. This (...) may be echoed by another patient who is experiencing the same problems and can quickly maintain a negative ambiance while exchanging in the group. (HCP 6)

Wouldn't it be better to put people who are perhaps at the same stage in the process? I'm quite in favor of [it] (...), whereas I would find it more interesting to do level 1, level 2, level 3. (HCP 5)

Patients' personalities or the heterogeneous composition of the groups requires management skills and adjustments from HCPs. We discussed this point elsewhere (Loyal et al., 2021).

Tailoring in group sessions

HCPs underlined that the patient in TPE must be thought of as unique. We showed elsewhere that several practices could have been identified by HCPs to concretely deploy an individualization process in the intervention (Ricci et al., 2021). Except for the initial assessment, all of these practices to tailor TPE sessions were informal:

You always have to adapt to the patients you have and that's not always easy. You have to change all the time according to the person you are in front of. It's not written. (HCP 10)

We have to focus communication on the patients' interests and not unpack everything we know. As I know them well, when I animate, I know very well who I have to look at, who I have to tell, why I am going to ask such a patient to give an example or how [they feel]. (HCP 2)

Factors linked to patient characteristics

HCPs and coordinators shared a common understanding of factors linked to patients such as motivation, program adherence and the importance of social support. However, TPE coordinators did not highlight the importance of cognitive abilities; they required adaptation for HCPs during their intervention.

We must also take into account intellectual level. (HCP 4)

There is always a cognitive factor in understanding, and it's important to take time and see why they don't understand. To take an example, I remember a patient who didn't understand quarters, halves and three quarters. (HCP 14)

Factors linked to team life

Leading sessions in pairs

HCPs viewed leading sessions in pairs as a way to 1) considerably enhance the quality of the delivered intervention and 2) reduce the fatigue induced by the session and its emotional impact.

I admit that I will hear some things; my colleague will hear it differently. She will [describe] it differently and I am delighted because I did not hear it the same way she did and it allows even more openness, debate and listening. (HCP 5)

If I do not have the idea right away to answer, I have (...) my colleague. (HCP 7)

When we are twos, we can complete our colleague's information and it's less tiring because [otherwise] we talking alone for two hours. (HCP 9)

When we have a problem with a patient, sometimes it's good to talk to someone, to have a different opinion. (HCP 11)

TPE coordinators did not seem to consider the benefit of leading sessions in pairs because they did not speak about this during the exchanges.

To lead sessions in pairs actually also depends on the day situation:

It depends on our working time, our availability and the fact that we can detach ourselves from the consultation or not. (HCP 9)

It depends; we try to be in pairs but it depends. (HCP 4)

Information exchange

TPE coordinators talked about formal exchanges within the program (i.e., content and frequency of meetings in program). However, none mentioned the stakeholders' informal exchanges. HCPs spoke mainly about informal exchanges and stressed how they compensated for lack of space to communicate:

It's a bit (...) like that, there's no time devoted to, it's informal, it's really between two consultations. It's not easy but that's how it is, we have no choice because we can't do [it] otherwise. (HCP 9)

We used to do it among ourselves but really informally. There was talk for a very long time of having regular meetings with the doctors; we were supposed to do it. It was a wish of ours. (HCP 11)

What I could dream of is a real exchange. I don't really know how it helps the work of others. I know that it makes the patient progress, so that's enough for me, I offer my knowledge of the patient to the psychologist this morning, for example, but I don't know if it helps her or not, I kind of miss that. (HCP 3)

Of course, not all exchanges can be contained in formal meetings. However, here, the HCPs felt a deficit of exchange and it seemed not to be perceived by the TPE coordinators.

Factors linked to TPE program characteristics

Evaluations by regional health agencies

In France, since 2010, a law has framed TPE, and interventions can be authorized by regional health agencies only if they complete specified criteria of quality. Annual self-assessments and a quadrennial assessment of the overall activity, processes and results condition the renewal of the authorization. The regional health agencies fund the non-hospital programs but not the hospital ones even if they have to be authorized.

TPE coordinators systematically discussed the evaluations to be sent to the regional health agencies to underline their utility but also their binding nature:

I spend hours and hours on paperwork for the regional health agency and all of this gets us nothing. (TPE coordinator 2)

It's quite heavy to fill out, but it allows us to have some concrete elements in relation to all that, such as the number of educational diagnoses, the number of educational diagnoses, the number of patients who came to the three sessions, the number of evaluations that were carried out. (TPE coordinator 7)

In contrast, only two HCPs spoke about the evaluations of the program:

To my knowledge, what is asked for is that: how many male, female, what age, maybe, by whom they are referred, when they were included so that we can give an active file per year. (HCP 11)

We don't have the time. However, they evaluate us on the quantity of patients we educate (...) the numbers, yes yes. The number of new patients, the number of educational diagnoses [patient's initial assessment], the number of assessments, attendance at workshops. (HCP 2)

However, HCPs say they complete program evaluation questionnaires. In other words, it appeared that there was no spontaneous link between the questionnaires to be completed and the authorization process.

The program functioning

The discourses from HCPs and TPE coordinators did not differ on 1) the description of patient recruitment and follow-up and 2) the number, rhythm, themes and animators of sessions.

The two groups perceived the support or lack of support from the institution exactly the same way.

Figure 1 shows no divergence between HCPs and TPE coordinators in TPE perception. Nevertheless, some dimensions are in the "blind spot" in one stakeholder group but not the other.

The non-convergent dimensions are located at both ends of a continuum from the micro-level within the intimacy of the TPE practice to the macro-level corresponding to the program integration in the health system. The meso-level dimensions featured convergent dimensions. The complete recovery of stakeholders' perspectives (without unthinking dimensions) could help improve health outcomes (Findikoglu & Watson-Manheim, 2016).

Discussion

Our results highlighted that participants commonly evoked five dimensions. Nevertheless, HCPs viewed six themes, from a more micro-level, as important, but TPE coordinators rarely addressed them and for the latter, one theme was located more at a macro-level. These dimensions can be the mark of a deficit in the perception of the other stakeholders' point of view. Therefore, these non-convergent dimensions constitute areas of improvement for patient education interventions.

We can summarize the findings as follows: 1) TPE coordinators might not be sufficiently aware of the need HCPs expressed for updating their knowledge on the diseases. HCPs sometimes felt disempowered during the intervention because of the media circulation of medical information. 2) The TPE coordinators also did not discuss the patient's initial assessment, but this was a major issue addressed during interviews with the HCPs. 3) TPE coordinators did not mention difficulties encountered in the management of group sessions, yet this exercise was perceived as very demanding for HCPs. 4) The tailoring process during the intervention mainly depended on HCP skills and experience and was not addressed by TPE coordinators. 5) TPE coordinators did not seem to consider the benefits of leading sessions in pairs. 6) TPE coordinators did not seem to be aware that HCPs would like to have more staff exchanges within programs. Moreover, from HCPs' point of view, this lack of formal communication was not compensated by informal exchanges in the team, 7) In contrast to TPE coordinators, HCPs were not informed about the usefulness of the evaluation

requested by the regional health agencies and considered it a constraint without measuring the importance of completing questionnaires for the program evaluation.

HCPs reported more practical dimensions for delivering the program with the necessary baggage (knowledge and skills), whereas coordinators reported more dimensions referring to the program-structured implementation that were essential to ensure its sustainability. HCPs and coordinators shared dimensions linked to essential prerequisites to deliver the program and develop a context of adhesion for patient education.

Qualitative methods can reveal critical insights to inform interventions (Bradley et al., 2007). Inductive qualitative approaches are also considered a valuable research method to capture and understand health care experiences (Foley & Timonen, 2015). For example, perception of communication and the dynamic process of collaboration among team members is well addressed in the literature with qualitative data collection from various stakeholders (Lancaster et al., 2015; Saint-Pierre et al., 2018; Wei et al., 2020). Perspectives of interdisciplinary staff (or team members) have been studied to maximize achievement in health actions (Blomma & Krevers, 2020; Issac et al., 2021; Kohler et al., 2019). However, to the best of our knowledge, qualitative data are systematically analyzed simultaneously without attempting to capture dimensions addressed by one professional but not the other. We kept the same interview guide and thematic grid regardless of the participant's profile (TPE coordinator or HCP) to diagnose convergent and non-convergent dimensions of importance between stakeholders by comparing their perceptions. This allowed for a pragmatic graphic visualization of areas of possible optimization regarding collaboration in TPE programs.

Methodological consideration

For the analysis of our study, we used a part of the CONCERTo complete dataset for comparison between HCPs' and TPE coordinators' point of view. Our approach was adaptive,

which is acceptable and common (Sim et al., 2018) but not entirely congruent with the principles of saturation in qualitative studies (Mason, 2010). Moreover, participants did not provide feedback on findings, which would have been interesting.

Conclusion

Our methodology might be used efficiently, at the level of health services in a health system (Garman et al., 2020) (e.g., home-based, rehabilitation or mental health services), to provide an overview of the different levers for improvement in services outcomes. In our study, we were interested in the TPE authorized in the French health system and were able to underline areas where collaboration between HCPs and TPE coordinators could be improved. Inquiring about levers needs and difficulties encountered in general TPE could allow for initiating collaborative reflections inside a particular program to optimize it. Possible considerations might be a specific plan for training development, encouraging reflection on the content and use of the initial assessment, organize leading sessions in pairs to save work time, and communication on the ins and outs of organizational imperatives that require HCP contribution.

By identifying area of suboptimal knowing each other professionals' role our approach could be utilized to inform future perspectives on education to improve collaboration. Literature showed that interprofessional education (IPE) is a fundament to develop collaborative practices and improve health outcomes (Spaulding et al., 2021). Interprofessional education (IPE) can be taught before and after the initial training whatever HCPs professions (Guraya & Barr, 2018). In France, there are 17 regional health agencies, which cover the entire territory. TPE programs are subject to a reporting obligation to their regional health agency who

ensures that the program complies with regulatory requirements. Among requirements, a 40 hours training in TPE for each HCP involved is especially mandatory. The regional health agencies listed the approved trainings. Our results highlight the need to integrate modules on IPE in approved trainings with a particular scope on knowing each other professionals' role at micro, meso and macro level.

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Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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Table 1. Interview guide for questions on therapeutic patient education (TPE) for both TPE coordinators and healthcare providers (HCPs)

Opening questions

“What do you think makes TPE successful, what works? What is important? What makes TPE less successful?”

Probing questions for in-depth exploration

1. Role of the institution
2. Organization/ structure of the TPE
3. Integration in the department/network, support
4. Role of training
5. Methods, facilitation, HCP–patient relationship, pedagogical tools used, customization
6. Integration of theoretical aspects in patient education
7. Impact of patient characteristics
8. Impact of social factors
9. Other aspects not addressed during the time of interview

HCP, healthcare providers

Table 2. Description of participants according to their role and disease addressed by the therapeutic patient education (TPE) program

Disease and type of sessions	Role	Participants' profession	Sex	Age group (years)	Years of experience in the role
Cardiovascular disease (no. 1)					
In groups	Coordinator	Physician	M	51-60	12
	HCP	Nurse	F	51-60	12
	HCP	Dietician	F	31-40	3
Cardiovascular disease (no. 2)					
In groups	Coordinator	Physician	F	41-50	7
	HCP	Nurse	F	51-60	18
COPD					
In groups	Coordinator	Physician	F	41-50	10
	HCP	Nurse	F	31-40	6
Chronic pain					
In groups	Coordinator	Physician	M	61-70	8
	HCP	Nurse	F	61-70	3
	HCP	Nurse	F	21-30	3
	HCP	Nurse	F	21-30	1
	HCP	Nurse	F	21-30	2
Asthma					
In groups plus one to-one	Coordinator	Physician	M	51-60	6
	HCP	Nurse	F	31-40	3
		Nurse	F	51-60	6
Hepatitis					
One to-one	Coordinator	Physician	F	51-60	2
	HCP	Nurse	F	31-40	6

Multiple pathologies In groups	Coordinator	Physician	F	51-60	9
	HCP	Nurse	F	41-50	8
	HCP	Dietician	F	41-50	8
	HCP	Physiotherapist	M	41-50	8
Total TPE coordinator	N = 7	Physician = 7	M = 4 F = 3	41-50 = 2 51-60 = 4 61-70 = 1	Mean:8
Total HCPs	N = 14	Nurse= 12 Dietician = 1 Physiotherapist = 1	M = 1 F = 13	21-30 = 3 31-40 = 4 41-50 = 3 51-60 = 3 61-70 = 1	Mean: 7

Notes: No one took on the role of both coordinator and HCP

Abbreviations: HCP, healthcare provider; COPD, chronic obstructive pulmonary disease

Figure 1. Synthesis of comparison of qualitative results from both healthcare providers (HCPs) and therapeutic patient education coordinators



