CLINICAL RESEARCH

Perception of therapeutic patient education in heart failure by healthcare providers

La perception de l’éducation thérapeutique du patient par les professionnels de santé dans l’insuffisance cardiaque

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KEYWORDS
Therapeutic patient education; Heart failure; Professional practices; Care relationship

Summary
Background. — Care provider support for therapeutic patient education (TPE), its results and relationships with patients are factors in the setting up and sustainability of this practice.
Aim. — With a view to understanding the factors determining TPE care provider participation and favouring its development, the aim of this study was to describe the perception healthcare providers have of TPE in heart failure.
Methods. — A national survey by self-administered questionnaire was performed in 2013 in 61 Observatoire de l’Insuffisance cardiaque (ODIN; Heart Failure Observatory) centres participating in the I-CARE programme. The cardiologist in charge of each centre received five questionnaires: one for him/herself and four for other healthcare providers working with him/her.

Abbreviations: HF, Heart failure; ODIN, Observatoire De l’Insuffisance cardiaque; SFC, Société française de cardiologie; TPE, Therapeutic patient education.
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Results. — We received 116 responses out of the 305 questionnaires sent (38.0%). Almost all of the responders stated that the patients were more observant after TPE sessions (91.4%). According to the responders, patients were better informed thanks to TPE (53.9%); they stated that TPE had changed their relationships with patients (81.9%); they also felt that they were educating the patient’s close family/friends at the same time as the patients (86.2%).

Conclusion. — The survey showed that TPE improves care relationships. Healthcare providers recognize that they have been working differently since the programme was set up, and want the patient’s close family/friends to be involved in treatment.

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Background
The aim of therapeutic patient education (TPE) is to help patients acquire or maintain the skills they need to better manage their lives with a chronic illness [1]. Nowadays, the value of TPE has been recognized in most industrialized countries for many chronic diseases [2–5]. In light of this, TPE is part of the recommendations for the treatment of heart failure (HF) [6,7], which has become a major public health problem [8,9]. There is growing evidence that patient education in "HF self-care" decreases HF morbidity and mortality, lowers hospital readmission rates and improves quality of life [10]. However, the efficacy of TPE programmes on HF remains questionable, in part because most studies in the literature lack a precise programme description, making comparative analysis of the studies difficult [11]. TPE requires active participation of the patient in the care and follow-up processes of the illness [12]. This non-pharmacological care takes both patient’s and care provider’s priorities into account, which facilitates patient monitoring. The efficacy of TPE in the improvement of patient health and quality of life, and in the reduction of morbidity and mortality, has already been demonstrated in the cardiovascular domain [6–13]. This innovative care system has changed the care provider/patient relationship by advocating a partnership that incites healthcare providers to consider each patient as an equal [14]. Moreover, TPE has modified the relationships that may exist among healthcare providers, given the multidisciplinarity of treatment by TPE [15]. Despite the fact that TPE in HF has proven its efficacy in randomized trials and is recommended [6–13], it remains a minority practice. Care provider support for TPE, its results and relationships with patients are factors in the setting up and sustainability of this practice. With a view to understanding the factors determining TPE care provider participation and favouring its development, the aim of this study was to describe the perception healthcare providers have of TPE in HF.
Methods

A national survey by self-administered questionnaire was performed from January to May 2013 in all Observatoire De l’INSuffisance cardiaque (ODIN; Heart Failure Observatory) centres (n = 61) participating in the I-CARE programme. The I-CARE programme was created by the Société française de cardiologie (SFC: French Cardiology Society) and the French Federation of Cardiology. In 2011, over 220 centres in France and French-speaking Benelux were participating in the I-CARE programme [16]. The aims of the I-CARE programme were to evaluate the effect of TPE on the morbidity and mortality of HF patients and to develop and implement standardized tools and training sessions. Evaluation of the impact of TPE on morbidity and mortality was performed by creating a vast ODIN registry from patients treated in participating I-CARE centres, whether these patients were educated (in terms of TPE) or not. In all, the ODIN registry included 3248 patients from 61 participating centres. The 61 participating ODIN centres were as follows: seven rehabilitation centres; five treatment networks; 32 general hospitals; 14 university hospitals; and three private clinics [17].

In each of the 61 centres surveyed, the cardiologist in charge received five questionnaires: one for him/herself and four for the healthcare providers that work with him/her (nurses, dieticians, physical therapists, psychologists, pharmacists, ergotherapists, MDs, etc.). Each questionnaire was accompanied by an information letter and a self-addressed stamped envelope. The responses were anonymous. Data treatment was authorized by the CNIL (French Data Protection Authority). The questionnaire was drawn up by a pluridisciplinary team of cardiologists, lawyers and specialists in ethics and public health.

The questionnaire was divided into five parts with 37 questions (19 close-ended questions and 18 open-ended questions enabling the justification of responses). The first part of the questionnaire dealt with general subjects related to the profession and perception of TPE. To best respect patient anonymity, we did not ask responders about their age, background/education, TPE experience or which ODIN centre they worked in. The second part concerned the implementation of TPE, particularly the target population, the reasons for excluding some patients and the healthcare providers putting it into practice. These questions were also meant to evaluate the information given to patients before participation in the programme. The third part sought to evaluate care provider feelings about the impact of TPE on patient lifestyles, appreciation of changes in their observance and justification of the modification in their lifestyles. The fourth part was concerned with the repercussions TPE has for care provider/patient relationships. Finally, the last part dealt with care provider feelings in terms of the presence of a third party in the care relationship.

Variables were reported as percentages of the total number of respondents. A textual analysis was used to process open-ended questions. Preliminary processing of open-ended questions was performed by grouping the responses in the various categories according to the ideas transmitted and the terms used by the responders.

For qualitative analysis of the results, we used the Morin-Chartier method [18,19], by designing a code grid that listed the various themes encountered in subthemes from detailed analysis of a sample of responses. Analysis of the results was simple, descriptive without comparison. For each responder group and for all of the responders, for each variable, the frequency of response modes was expressed in numbers and in percentage of total responses. We included all of the ODIN centres. For a proportion of the answers at 25%, the sample size that was obtained enabled an estimated 95% confidence interval of between 6% and 11%, according to the values of the frequencies observed.

Results

The results are summarized in Table 1.

Targeted population and perception of TPE by healthcare providers

We obtained 116 responses out of the 305 questionnaires sent: 30 responses from cardiologists (49.2%) and 86 responses from other care providers (35.2%: nurses, 53.5%; nutritionists, 29%; physical therapists, 8.1%; psychologists, 4.6%; pharmacists, 1.2%; ergotherapists, 1.2%; generalists, 1.2%: rheumatologists, 1.2%). Of the 116 questionnaires received, all were completed in full by the responders.

Most of the responders viewed TPE as a continuous process in patient care (93.1% of all responders, 90.0% of cardiologists and 94.2% of other care providers), as a means of exchanging information with the patients in terms of their illness (61.2% of all responders, 63.3% of cardiologists and 60.5% of other care providers) and as an educational process (40.5% of all responders, 46.7% of cardiologists and 38.4% of other care providers).

Setting up TPE

The healthcare provider who proposed TPE to patients was the cardiologist (82.8% of the total population, 76.6% of cardiologists and 84.9% of other care providers). The cardiologists (56.7%) and other care providers (62.8%) stated that they did not propose TPE to all patients. The cardiologists justified their response with reasons linked to the patient characteristics (76.5%), organization of care (47.0%) or oversight (11.8%). The other care providers cited reasons linked to the patient characteristics (81.5%).

The obligation to inform patients before the implementation of a TPE programme was considered as necessary (80.2% of the total population, 60.0% of cardiologists and 87.2% of other care providers). This information favoured understanding and motivated patients to give their informed consent (60.3% of the total population, 40.0% of cardiologists and 67.4% of other care providers). The majority of cardiologists considered that the information given to the patients was not sufficient (53.3%), whereas the majority of the other care providers considered it as sufficient (54.6%).

Impact of TPE on patient lifestyle

Almost all of the responders stated that the patients were more observant after attending TPE than if they had had traditional care management (91.4% of all responders, 93.3% of cardiologists and 90.7% of other care providers).
### Table 1 Descriptions of the perception of therapeutic patient education in heart failure by healthcare providers.

<table>
<thead>
<tr>
<th></th>
<th>Total (%)</th>
<th>Cardiologists (%)</th>
<th>Other healthcare providers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responders</td>
<td>116 (38.0)</td>
<td>30 (49.2)</td>
<td>86 (35.2)</td>
</tr>
<tr>
<td>How do you view TPE?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPE is a continuous process in patient care</td>
<td>108 (93.1)</td>
<td>27 (90.0)</td>
<td>81 (94.2)</td>
</tr>
<tr>
<td>TPE makes it possible to exchange information on the illness with the patient</td>
<td>71 (61.2)</td>
<td>19 (63.3)</td>
<td>52 (60.5)</td>
</tr>
<tr>
<td>TPE is an education</td>
<td>47 (40.5)</td>
<td>14 (46.7)</td>
<td>33 (38.4)</td>
</tr>
<tr>
<td>Compared with traditional care, do you think TPE provides added value in patient care?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>115 (99.1)</td>
<td>30 (100)</td>
<td>85 (98.8)</td>
</tr>
<tr>
<td>No</td>
<td>0 (0.9)</td>
<td>0 (0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>If yes, how?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More knowledge</td>
<td>62 (53.9)</td>
<td>17 (56.7)</td>
<td>45 (52.9)</td>
</tr>
<tr>
<td>Improves the care relationship</td>
<td>25 (21.7)</td>
<td>10 (33.3)</td>
<td>15 (17.6)</td>
</tr>
<tr>
<td>Patients feel more supported</td>
<td>15 (12.9)</td>
<td>5 (16.7)</td>
<td>10 (11.8)</td>
</tr>
<tr>
<td>Patients more confident on a daily basis</td>
<td>13 (11.3)</td>
<td>6 (20.0)</td>
<td>7 (8.2)</td>
</tr>
<tr>
<td>Has TPE changed your relationship with patients?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95 (81.9)</td>
<td>21 (70.0)</td>
<td>74 (86.1)</td>
</tr>
<tr>
<td>No</td>
<td>21 (18.1)</td>
<td>9 (30.0)</td>
<td>12 (13.9)</td>
</tr>
<tr>
<td>If yes, how?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship more stable</td>
<td>55 (57.9)</td>
<td>9 (42.9)</td>
<td>46 (62.2)</td>
</tr>
<tr>
<td>More exchange of information between care providers and the patient</td>
<td>45 (47.4)</td>
<td>7 (33.3)</td>
<td>38 (51.3)</td>
</tr>
<tr>
<td>Enables a holistic approach</td>
<td>42 (44.2)</td>
<td>6 (28.6)</td>
<td>36 (48.6)</td>
</tr>
<tr>
<td>Greater confidence</td>
<td>15 (15.8)</td>
<td>3 (14.3)</td>
<td>12 (16.2)</td>
</tr>
<tr>
<td>Greater tolerance in terms of</td>
<td>5 (5.3)</td>
<td>2 (9.5)</td>
<td>3 (3.5)</td>
</tr>
<tr>
<td>non-observance</td>
<td>4 (4.2)</td>
<td>0 (0)</td>
<td>4 (5.4)</td>
</tr>
<tr>
<td>Overall, what do you think of the presence of third parties in the care relationship?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added value</td>
<td>93 (80.2)</td>
<td>22 (73.3)</td>
<td>71 (82.6)</td>
</tr>
<tr>
<td>Reassuring for the patient</td>
<td>82 (70.7)</td>
<td>20 (66.7)</td>
<td>62 (72.1)</td>
</tr>
<tr>
<td>Optional</td>
<td>64 (55.2)</td>
<td>20 (66.7)</td>
<td>44 (51.2)</td>
</tr>
<tr>
<td>Necessary for the success of the programme</td>
<td>59 (50.9)</td>
<td>12 (40.0)</td>
<td>47 (54.6)</td>
</tr>
<tr>
<td>Necessary for the patient</td>
<td>53 (45.7)</td>
<td>10 (33.3)</td>
<td>43 (50.0)</td>
</tr>
<tr>
<td>Restricting for the patient</td>
<td>15 (12.9)</td>
<td>4 (13.3)</td>
<td>11 (12.8)</td>
</tr>
<tr>
<td>Problematic</td>
<td>10 (8.6)</td>
<td>2 (6.7)</td>
<td>8 (9.3)</td>
</tr>
<tr>
<td>Compulsory</td>
<td>8 (6.9)</td>
<td>3 (10.0)</td>
<td>5 (5.8)</td>
</tr>
<tr>
<td>When an expert patient steps in, what should his/her role be in TPE sessions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing</td>
<td>102 (87.9)</td>
<td>25 (83.3)</td>
<td>77 (89.5)</td>
</tr>
<tr>
<td>Advising</td>
<td>55 (47.4)</td>
<td>16 (53.3)</td>
<td>39 (45.3)</td>
</tr>
<tr>
<td>Listening</td>
<td>47 (40.5)</td>
<td>11 (36.7)</td>
<td>36 (41.9)</td>
</tr>
<tr>
<td>Observing</td>
<td>27 (23.3)</td>
<td>10 (33.3)</td>
<td>17 (19.8)</td>
</tr>
<tr>
<td>Training</td>
<td>21 (18.1)</td>
<td>6 (20.0)</td>
<td>15 (17.4)</td>
</tr>
</tbody>
</table>

Data are expressed as number (%). TPE: therapeutic patient education.

\( ^a \) Several answers possible.

According to the responders, TPE changed patients' habits (86.2% of all responders, 93.3% of cardiologists and 83.7% of other care providers) and the change was justified (92.0% of all responders, 89.3% of cardiologists and 93.0% of other care providers). The cardiologists justified these changes by the improvement in patient quality of life (40.0%) and by the fact that the patients had given their informed consent (24%). The other care providers justified these changes by the improvement in patient health practices (44.8%) and their health status (37.3%). For the responders, TPE made the
patients more responsible (94.8% of all responders, 96.7% of cardiologists and 94.2% of other care providers), was not sufficient to make the patient completely autonomous (61.2% of all responders, 73.3% of cardiologists and 57.0% of other care providers), but could not be bad for a patient in case of failure (63.8% of all responders, 63.3% of cardiologists and 63.9% of other care providers). They did not think that there could be a medico-legal risk linked to the implementation of TPE (68.1% of all responders, 66.7% of cardiologists and 68.6% of other care providers).

Impact of TPE on the care relationship

Compared with traditional care, TPE was viewed as bringing more to patients (99.1% of all responders, 100% of cardiologists and 98.8% of other care providers).

The responders stated that TPE had changed their relationships with the patients (81.9% of all responders, 70.0% of cardiologists and 86.1% of other care providers). According to them, the training they had in TPE changed their way of informing patients (85.3% of all responders, 80% of cardiologists and 87.2% of other care providers) and TPE changed the way they view patients (64.7% of all responders, 70.0% of cardiologists and 62.8% of other care providers).

The cardiologists recognized that they had more confidence in their patients’ management of their illness (47.6%) and stressed the need to take the lifestyles, beliefs and values of patients into consideration in order to determine the programme (47.6%). The cardiologists (73.3%) and other care providers (77.9%) stated that TPE had changed the way they work.

Third-party participation in care through TPE

Three quarters of the responders thought that the presence of a third party in the care relationship could be useful (71.6% of all responders, 66.7% of cardiologists and 73.3% of other care providers).

The presence of the patient’s close family/friends

The responders agreed that they felt they were educating the close family/friends at the same time as the patient (86.2% of all responders, 90.0% of cardiologists and 84.9% of other care providers), an education that was necessary to improve patient care (66.4% of all responders, 70.0% of cardiologists and 65.1% of other care providers). They stated that they felt they had changed the habits and convictions of the close family/friends (69.8% of all responders, 73.3% of cardiologists and 68.6% of other care providers).

The cardiologists (60.0%) thought, more frequently than other care providers (47.7%), that the presence of a patient’s close family/friends could present a problem in terms of the patient’s private life. More than half of the responders considered that the presence of a patient’s close family/friends was not a problem for professional secrecy (60.3% of all responders, 50.0% of cardiologists and 63.9% of other care providers).

The presence of an expert patient

Three quarters of the responders said they knew about expert patients (74.2% of all responders, 70.0% of cardiologists and 73.3% of other care providers); they had never had the opportunity to work with one (74.1% of all responders, 83.3% of cardiologists and 70.9% of other care providers) and thought that the use of an expert patient would not be dangerous in the care of the illness (52.6% of all responders, 56.7% of cardiologists and 51.2% of other care providers). The responders considered that the presence of an expert patient would not be a problem in patient care (57.8% of all responders, 56.7% of cardiologists and 58.1% of other care providers); however, they did think that it would be a problem regarding the patient’s private life (50.9% of all responders, 70.0% of cardiologists and 44.2% of other care providers) and professional secrecy (52.6% of all responders, 70.0% of cardiologists and 46.5% of other care providers).

Discussion

Our survey showed that healthcare providers involved in such programmes have a positive perception of TPE in HF and that it improves the patient’s quality of life as well as the care provider-patient relationship. This observation is an essential factor for the setting up, expansion and sustainability of this programme. However, the survey confirms that a lack of time and, more generally, problems linked to the organization of this programme are major constraints that limit its development [20].

Impact of TPE on patient lifestyle

The survey confirmed that care with TPE enabled the patient to have more confidence in the daily management of his/her illness [21]. The involvement of other patients and the inter-disciplinarity of care [22] enable a sick person to feel more supported as a patient. The survey showed that healthcare providers are conscious of the phenomenon of giving the patient a sense of responsibility for his/her care through TPE; they realize that they play an important role in changing patient’s and family’s habits by recommending good health practices for patients. Although such changes raise ethical questions, care providers believe that their influence on a patient’s lifestyle is justified and, above all, necessary to improve the patient’s state of health. All of the care providers agree on the need to inform the patient during the TPE programme in order to prevent self-medication behaviour and to reassure the patient on a psychological level. Training and qualification of care providers in TPE are therefore important.

Impact of TPE on the care relationship

The survey showed that by proposing care through TPE, healthcare providers want, above all, to make patients more autonomous, serene and responsible in the management of their illness. However, practical difficulties, sometimes involving patients, sometimes the organization of care or care providers who are not familiar with TPE have been reported. In all cases, the survey showed that TPE has
changed the care provider-patient relationship positively. This new form of care management reinforces the contact between the care provider and patients. The care relationship will appear to be more stable, reinforced by a redefining of the roles of each party as well as a possible care partnership. TPE also enables care providers to view patients differently by offering them the opportunity to believe more in their ability to manage their care and the daily ups and downs of the illness on their own. The biopsychosocial approach of TPE improves the relationship by favouring individualization and personalization of care [23].

Third-party participation in care through TPE

Healthcare providers consider the presence of close family/friends during TPE sessions as being positive; they see solid support and even additional motivation for patients to change habits that are risky for their health. However, the survey showed that care providers are conscious that such participation can be intrusive, invasive and even troubling for the patient. It would therefore appear to be necessary to consider the presence or not of close family/friends case by case during TPE sessions. Although the great majority of responders consider that the participation of a close family member or friend in TPE sessions poses no particular problem in terms of medical confidentiality [24], this new situation should be taken into consideration, as the patient’s entourage will have easy access to the patient’s medical information.

The survey also showed that TPE could have an impact on the lifestyle of the patient’s entourage. The care providers had the impression that they were educating close family/friends at the same time and in the same manner as the patient. For them, this training is justified and necessary for the success of the programme. This point is debatable in that this “indirect” education is not meant to improve the quality of life of the patient’s entourage but rather to enable the patient to feel more supported and less isolated during his/her changes in habits.

As for the opportunity to include an expert patient in the TPE sessions, the survey revealed that this solution is not very developed in practice. While the great majority of care providers know it exists, few have already worked with an expert patient. Although the participation of this new player does not appear to be dangerous for most of the care providers, they nevertheless stressed the importance of both monitoring his/her actions with the patients and determining the exact nature of his/her missions.

Survey limitations

One of the limitations of this study was the overall response rate. However, the response rate was in the low mean for a study with healthcare professionals [25]. Moreover, the survey was only sent to care providers participating in a specific programme (the I-CARE programme) practicing TPE. However, since 2010, TPE programmes have required authorization, and the great majority of the programmes authorized for HF are I-CARE programmes. A limitation related to the subjectivity and partiality of the responders must be raised. Indeed, the study was intended only for healthcare professionals participating in the I-CARE programme, practicing TPE and therefore convinced of the benefits of such a practice. Moreover, the I-CARE programme includes a significant number of hospital-based TPE programmes for HF in France. Finally, even if the use of open questions allowed responders to freely state or argue their answers, analysis of these open questions constituted a limitation to this study, raising the fear of a false appreciation or interpretation of their answers.

Conclusion

The survey showed that TPE improves the traditional care relationship through holistic care. The care providers involved in TPE recognize that they now work differently. Thus, while they had the patient’s health in their hands with traditional care, they are now accompanying patients and working to make patients understand they are responsible for their health. By fostering the exchange of information, the care providers consider that their relationship with patients is more balanced: on one hand, they are more attuned to the needs and expectations of the patients and, on the other hand, the patients seem to be more confident. There remains the question of involving a third party in the care relationship — particularly the family. Should comprehensive care of the patient extend to educating the family in order to increase the chances of success and sustainability of TPE? It would be interesting to ask healthy people this question from an ethical and legal point of view.

Acknowledgements

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Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.acvd.2015.03.008.

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