Original article

Motivating patients with chronic diseases

Motivare i pazienti con patologie croniche

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Abstract – Therapeutic patient education is being offered more and more frequently not only to help patients understand their illness and treatment, but also to "help them become autonomous." Putting this into practice in the long term will depend on their "motivation" in treating themselves. Therapeutic education offers the psycho-pedagogic means which are "fundamental to motivating patients" so that they themselves take charge of and adapt their own behaviour in the long term. There are many difficulties linked to motivating patients in the long run and these make caregivers' work frustrating.

In practice, "motivating the patient" is often not an easy task, particularly where changes in behaviour (nicotine dependence, alcoholism, obesity, sedentary lifestyles) and chronic silent illnesses (diabetes, arterial hypertension, hyper-cholesterol) are concerned.

Building on new research carried out with the allosteric approach to learning, we propose in this text a new approach to "motivation" in therapeutic education. The allosteric model uses the patient's concepts in order to transform them by simultaneous deconstruction-construction. We examined fundamental, internal and external factors as well as the teaching environment, all of which motivate patients to change their behaviour. This new approach offers perspectives for improving patients' motivation and their compliance to therapy.

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1. Introduction: The role of motivation in compliance

The function of therapeutic education (TE) is not only to increase patients' knowledge and skills. Its main objective is to make them aware of their problem, whether as a diagnosis of the illness or a description of the risk factors involved. This allows them to integrate these notions and follow the caregiver's recommendations more closely[1,2]. Most of all, TE is used to help patients follow a treatment over a long period of time, or even to help them change "an aspect of their lifestyle"[1,3].

When a caregiver passes on information to patients, too often we notice that they retain very little of the facts and practical advice, and hardly follow the recommendations at all[4,5]. In addition, patients only partially understand the explanations given to them and do not adhere closely to the proposed therapeutic plan[2,6]. Compliance to therapy varies enormously from 22% to 72%, depending on the pathologies involved or the degree to which the illnesses are chronic[7]. The highest rate of failure is linked to changes in lifestyle habits, particularly in relation to nicotine dependency, alcoholism and obesity. With obesity, we note great difficulties in changing dietary habits or sustaining a physical activity[8,9].

Therapeutic education, then, offers "to motivate the patient in order to obtain a higher degree of compliance"[10].

2. Therapeutic patient education and the allosteric model

Developed in the 1990s, research on the allosteric learning model[11] allowed us to re-examine what motivation really means at school or in TE, as well as to define its components and dynamics[12-15]. The normal "frontal" model of learning says that in order to teach, it is sufficient to "say it and show it" with enough conviction. However, TE teams increasingly favour the constructivist model. This emphasises the construction of patients' knowledge through trial and error, expression or cognitive conflict. We suggest integrating the allosteric model to our own therapeutic education**.** This model focuses on patients' concepts (ideas, health beliefs, method of reasoning, etc.) in order to help them transform them step by step. With the allosteric model, noth-

ing in the processes of learning or changing behaviour is immediate or direct. Therefore, through an indirect approach, the caregiver or the caregivers team have some chance of success. Caregivers must establish an allosteric teaching environment, which alone can interact with the patient's existing conceptions.
This new psycho-pedagogical environment provokes a transformation through simultaneous deconstruction and construction. Patients cannot establish a new form of behaviour without deconstructing the old one. However, they cannot start by deconstructing the old behaviour. The dynamic of change mainly involves a complex and paradoxical process. This takes place on four levels of interaction: the intentional (affective, emotional); the infra-cognitive (intimate reasoning, automatic thoughts); the cognitive (information, concepts..) and the meta-cognitive (knowledge of knowledge, values…). Applied to patient-caregiver situations, these levels of interaction help uncover the "facilitating factors"[3].

3. What do we mean by motivation?
For a long time now, clinicians have considered motivation to be one of the main determining factors in a psychotherapeutic process[16]. However, early research produced contradictory results[17-20]. This can be explained by several factors: the variety of definitions of what we call "motivation" and differences in the types of population studied[16,21]. The term "motivation" suggests a trigger, a magical force that will automatically generate more effective compliance. Better still, motivation implies a "catalyst for change". Therefore, patients who do not accept their treatment are labelled as "non motivated". This means that not only is the patient stigmatised, but that there is a bias in favour of the caregiver. Non-motivation can be due to many external and internal factors; it can also be caused by fear, anxiety, beliefs, etc. These are all elements which need to be investigated as potentially limiting factors.

The role of the motivational type cognitive processes in changing behaviour became a question of great importance in the field of psychology in the 1970s[22-25]. This model of change was next applied to diverse forms of therapy involving: smokers[26]; participants in a weight control programme[27]; alcoholics in an out-patient clinic[28] and phobic patients[29-33].
The development of the "motivational interview" (MI) in the 1980s by psychologists William Miller and Stephen Rollnick[34] also emphasised the importance of motivation. The interview was first developed for addictive illnesses, but then was also used for all situations where ambivalence and motivation are central to the change process. An attitudinal approach and a series of clearly-specified techniques were then defined to help explore and resolve ambivalence when faced with change. The idea of motivation has also recently been taken up in health education[35] and in TE where nutrition[36-37] or obesity[3] are concerned.

4. The basis of motivation
In education, motivation has occupied a central place in contemporary pedagogy only since the 1930s. This is due mainly to the influence of behaviourist theories of learning. At that time, the word came to mean as much "need" as "will". It leaned more towards the external process which leads someone to want to learn, and not towards the deep internal desire to learn, found within each individual. The behaviourist movement which promoted the word limited learning to conditioning; it did not take into account emotional and affective aspects or patients' concepts. These were all considered as a kind of "black box", the contents of which were undecipherable.
In fact, in therapeutic teaching strategies, motivation appears as something of a blanket concept. In the long term, it would be better to speak of "a desire to change" or as it was called in the eighteenth century, "libido sciendi". The emphasis, therefore, is placed upon the appetite, dynamic and trigger for learning as well as on the process - all of which are necessary factors for inducing change. Most often, motivation is defined as a "state of activation" which occurs in response to a need requiring fulfilment, such as improving quality of life or securing a benefit.

The "desire to change" seems to be a paradoxical and systemic process which does not fit into a model, let alone a formula. However, its dynamic can be broadly described and a certain number of contexts, situations and favourable activities identified and formulated. In particular, it can be said that change comes from the individual him/herself because "it comes from inside"[31]. However, at the same time, specific external factors can interfere directly with the patient. These factors can be grouped into what we call the "didactic therapeutic environment"[13], established by the caregiver or the caregivers team, and adapted to the patient's personality. These results lead us beyond the motivational interview in order to establish a didactic Therapeutic Education environment or motivational environment which will encourage the emergence of the desire for change. This environment plays a crucial role in patients' intrinsic and specific factors. The internal and external factors will, therefore, permanently interact as they progressively modify the motivation to change.

Motivation, then, is always the "product" of the interaction between an individual's internal need and the various elements of his/her environment which will stimulate this interior state. A new internal state, a trigger for learning, must be generated in order to create a dynamic of change.

Motivation = Internal factors x Environment

5. Internal factors and fundamental needs which influence motivation

The idea of need as a vital necessity has been attested to since the 12th century. It was taken up again by the founding fathers of the modern economy in the 19th century (for example, J-B Say) under the heading of "fundamental needs". In 1954 Abraham Maslow established an initial list of needs which he arranged hierarchically in the form of a pyramid of five categories. He placed physiological needs at the base (hunger, thirst, etc.), followed by the need for security (protection, order, principles, etc.), social needs (belonging, acceptance, love, etc.), the need for self-esteem (success, appreciation, etc.) and finally, the need for self-realisation (personal expression, creativity, etc.)[38-39].

This classification was taken up or built upon in a number of fields, including TE. In practice, we prefer not to arrange these needs in a hierarchy, as they continually interact with each other (fig 1). Initially, the most important needs are certainly physiological: hunger, thirst, sleep and sexual needs. However, unlike in animals, early education greatly transforms and denatures these needs. For example, in humans, the dietary practices of celebratory meals have very little to do with hunger! Other needs which have become as fundamental are those for security, self-realisation, increased skills, esteem and belonging. (fig. 1)

Figure 1

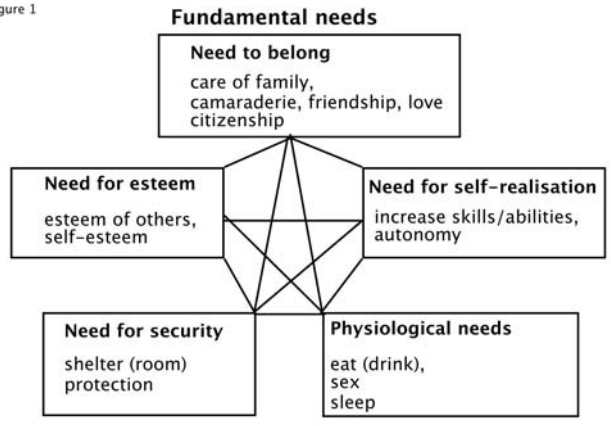

Figure 1. Fundamental needs

All these needs form the basis of the strong motivations which can lead to learning and changing. However, it is always a question of intensity. Each of these needs can play the role of a limiting factor if they generate a change perceived as too threatening.

In this "seedbed", fundamental needs will be born, interacting continuously with environment, interests, desires, and pleasures. For patients suffering from a chronic illness, motivation does not depend solely upon their immediate needs. Individuals present interests and desires, but often also numerous fears. For example, consciously or unconsciously, individuals choose plans to be or do something; these plans in turn will lead them in a certain direction. Each plan, therefore, takes on an affective value for individuals. They will involve themselves in it personally and willingly, especially if they can give it meaning and, in return, get some pleasure or a "little extra" out of it (fig. 2).

Figure 2

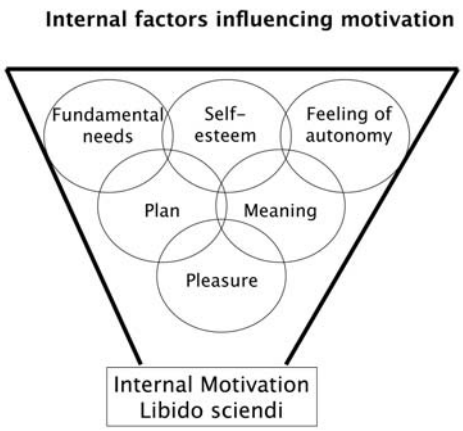

Figure 2. Internal factors influencing motivation

Self-perception, commonly labelled self-esteem or self-confidence, have a great influence on the dynamic of patients' motivation. On the other hand, unhappiness and frustrations block the motivation process. Similarly, the patients' perception of the therapeutic situation is crucial. Patients will be motivated to a greater or lesser degree according to the importance and quality of a teaching activity - or at least according to the image they have of it based upon the plans they are pursuing. The strength of their involvement will be much greater if they find the proposed information "useful" for their illness, treatment or quality of life.

All this takes place against a background of interaction between the needs, interests, desires, expectations, aspirations, anxieties and fears of the patient, and the therapeutic situation. Motivated patients demonstrate their desire to change and their perception of the therapeutic situation which they must accept or submit to. To fulfil their plans, they must understand the relevance and importance of their proposed treatment. They must feel capable of accomplishing the activities put before them

or the demands made of them. Here, control can be exercised in the process of a therapeutic learning activity as well as its consequences. Motivation is enhanced by the patient's feeling of autonomy in this dynamic; on the contrary, constraints greatly work against it.

6. External factors influencing motivation

The roots of motivation, therefore, lie in the range of the patient's internal mechanisms. Motivation can be compared to a force, an impulse, a tension. It allows the creation of a dynamic inherent to change. However, with important exceptions, motivation means very little without a suitable environment in which it can be generated. It is a type of response to this environment (fig. 3).

Figure 3 **Internal and external factors influencing motivation**

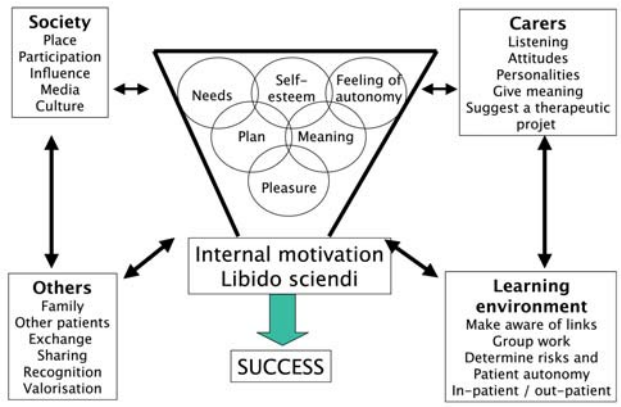

Figure 3. Internal and external factors influencing motivation

A number of factors can be sources of motivation. The first of these is society itself with its attributes, especially those to which the patient is sensitive. For example, today the media play a very important role in our society. Another factor is "the other person"; this can be a familiar member of the patients' environment or another contact. Whoever the other person is, they will affect patients' motivation, either through the stimulation the patients receive from them, the image they wish to present to them, or by the recognition they receive from them. Other patients can also motivate the individual for the same reasons, or because he/she wishes to emulate them. It may also be a wide range of other people, such as a patient's chemist or concierge. The sharing and exchanging with others involved here can sometimes be considerable. The recognition or valorisation by a peer can often be a trigger of motivation.

7. The patient's health carers

The care centre with its pre-determined practices is a considerable source of motivation for patients. Also, the teaching environment is particularly crucial for motivation and change.

At the basic level, an activity or a TE situation must present several characteristics in order to be motivational. It must take into account the patients' needs, interests or desires involved in their plans for being or doing something. However, the role of the caregiver is not to remain at the level of patients' needs or immediate desires. The caregiver must always offer them an educational plan. But, instead of proposing fresh knowledge directly, he/she will first try to call upon the patients' concepts and existing knowledge. Next, the caregiver will make patients aware of the links with their pathology.

Let us take a common example: proposing an insulin treatment for a type 2 diabetic. The caregiver will motivate patient if he/she finds analogies or appropriate metaphors. However, the caregiver will motivate them even more if he/she can demonstrate links between the hormone and the patient's health. Offering explanations centred on the patient ("how does your insulin work?") or dealing with the big existential questions ("why do I have to cure myself?", "why am I ill?") are always sources of motivation. Using interactive procedures or impromptu elements can help patients start questioning themselves.

Other factors can also stimulate motivation. For example, educational situations are even more "motivating" if they involve novelty rather than routine and lead to questions rather than immediate answers. Finally, educational situations can give patients the opportunity to make choices. This is even more positive as patients are given the impression that the choices depend primarily upon them.

A highly-skilled caregiver with a well-affirmed personality can also influence patients' motivation in a positive way. Caregivers who are themselves enthusiastic about the content of their teaching, or at the prospect of sharing it with patients, will transmit to them a desire to excel. Listening and paying attention to patients are always positive elements, and the enthusiasm a caregiver puts into his/her words can be contagious.

8. The motivation process

How can this desire to change be brought effectively to life? At the material level, the process is complex, systemic and even paradoxical. Genuine and deep-seated motivation comes from inside; the patient as an individual is the "author" of his/her own learning process[13]. However, the caregiver, or better still, the care team or health centre, can set this process in motion as well as engage, awaken, encourage and help it to emerge through a variety of elements which they can propose to patients and which may find an echo with them.

The emergence of motivation for change is certainly never an easy task and its maintenance over time is of even greater complexity. The maintenance of this dynamic depends on the degree of meaning or pleasure which the patient continually finds in it. Motivation maintains the energy necessary to see a plan through to its finish. It helps patients stay attentive and alert despite the cognitive or affective difficulties which may arise. For this, the caregiver must constantly challenge patients and even shake up their health beliefs, all the while accompanying them. The more intense the challenge, the closer the accompaniment must be.

Success in a situation, or better still, progress in treatment is another source of motivation. When objectives are small, there will always be success. Success gives patients a positive feedback and favourably influences their perception of their own ability. Patients then give value to the activity in which they have succeeded. Surer of themselves, they start to feel that they exercise a greater control over the activities they undertake or over their health care plan. The phenomenon is self-perpetuated by a feeling of pleasure which reinforces motivation. At the same time, motivation pushes patients to give meaning to what they are learning. This, in turn, increases motivation. All evaluations must be talked through with patients. Improving symptoms, lab examinations, experiences, pains and loss of weight should all be discussed with them in order to motivate them and make them aware of changes, however small they are!
Conversely, setbacks magnify demotivation. This is especially true of heavy and repeated setbacks where no end seems in sight. However, not all setbacks and errors are demotivating. The caregiver can play down mistakes by considering them as simple slip-ups. He/she can emphasise the fact that success is never immediate or constant, and that false steps are an integral part of change in behaviour. If individuals see errors in a positive light and are able to explain them, they can use them to avoid making similar mistakes in the future.

9. The caregiver can promote motivation

Beyond understanding the dynamic of motivation, the caregiver can only provoke a change in patients' behaviour if he/she approaches them with a fresh perspective, centred on considering them as individuals. This approach is characterised by the importance of listening, an empathic and affirming attitude and the recognition of resistance. Its goal is to bring the arguments in favour of change out of the patient; the exploration and resolution of the ambivalence associated with all behaviour modification is a normal and compulsory stage to go through. At best, this approach avoids factors such as confrontation and persuasion, which often only increase resistance to change. On the other hand, it insists on patients' involvement, especially in therapeutic choices, and on the reinforcement of self-esteem.
In interviews with patients, the caregiver is always too directive in the way in which he/she helps them to explore and resolve ambivalence. A "motivating environment" centred on patients can be more effective in encouraging them to change behaviour, particularly where they are accompanied in the exploration and resolution of their ambivalence. Suggested activities or situations aim at increasing patients' confidence in themselves and in caregivers or place of care. They also aim at reinforcing patients' self-esteem through working on themselves or through encounters with other patients.
This environment will be adapted to each patient and, above all, to their level of motivation of the moment. Motivation is never constant, as patients can go through different phases. Some days, they may not recognise the existence of a problem. On the other hand, they can start planning change by seeking advice or help, even if at this stage they do not really believe in it, or by actually implementing in place a change of behaviour, such as moderating their consumption of fats.
If patients are not yet ready to change, it is inappropriate to offer them a motivational situation right away. Anything resembling or even suggesting a rapid solution is often rejected. The caregiver who seeks to persuade, argue, demonstrate or tell patients what they must do will only create greater resistance.
At this stage, it would be more effective if the caregiver concentrates on setting up educational situations which can help patients perceive risks or problems. His/her intervention is designed to create a dissonance or to bring out doubts. Patient-to-patient confrontations or activities which allow patients to express their fears or anxieties appear to be the most positive.
However, when patients start entering a dynamic of change, the caregivers' work may involve accompanying them in the exploration of ambivalence. They can help them express the range of reasons in favour of change and the difficulties of change, as well as the risks to be run in not changing. The situations proposed must increase patients' confidence in their capacity to change their behaviour. Encouragement here is essential. Any effective change, even if incomplete, must be affirmed; relapses must be played down immediately in order to engage the patient once more in a process of intention, preparation and action.

Finally, in order to accept treating themselves and to persevere in compliance with treatment, patients must be convinced that they are indeed suffering from an illness. They must be helped to realise that this illness and its consequences can be serious for them and that following their treatment can have a beneficial effect. It is also important to accept that the benefits of treatment positively counterbalance advantageously the psychological, social or financial constraints and the secondary effects engendered by the treatment.

10. Conclusion: I'm motivated if…

The aptitude for change is not only a personality trait but also the fluctuating result of relational interactions. A large number of factors internal and external to the patient intervene to facilitate change, as shown in figure 4.

Figure 4 **Parameters of a motivating environment**

Figure 4. Internal circle: personal parameters; external circle: external parameters

These different types of indicators are linked to the bio-psycho-social profile of the individual. This checklist allows a prediction to be made of which behaviours and situations can be favourably linked to the conditions of treatment. However, each indicator has a different "weight" for different stages and types of treatment. The internal indicators of motivation unique to each patient are situated at the centre of figure 4. The external indicators issuing from the motivational teaching environment are described in the outer circle.

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