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Observational and prospective study: evaluation of beliefs and representations of chronic treatments of polymedicated patients hospitalised in a vascular medicine and surgery department

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ABSTRACT

Objectives Today, the involvement of patients in their care is essential. As the population ages increases, the number of patients with chronic diseases is increasing. In the vascular medicine and surgery departments, patients are polymedicated and mostly suffer from several chronic diseases. Approximately 50% of patients with a chronic disease are not adherent. Among the factors that can influence therapeutic adherence are the beliefs and representations of patients.
To evaluate the beliefs and representations of chronic treatments in patients with multiple medications and hospitalised in a vascular medicine and surgery department, and to evaluate the medication adherence, the knowledge and the importance patients attach to their treatments.

Design Observational, prospective and a single-centre study.

Setting The study was conducted in a French tertiary hospital centre of around 3000 beds in 9 institutions.

Participants Adult polymedicated (ie, minimum of five chronic treatments) patients hospitalised in a vascular medicine and surgery department were included after application of the exclusion criteria.

Methods Patient interviews were carried out in the department and were based on three interviewer-administered questionnaires (a global questionnaire, the Belief Medical Questionnaire and the GIRERD questionnaire).

Results Our study showed that patients perceived their treatments as beneficial rather than worrying. A correlation between medication adherence and beliefs was observed. 'Non-adherent' patients had a more negative overall view of medication than 'adherent' patients. The level of compliance and knowledge of our patients was low. Only 11% of the patients were 'good adherent', 16% of the patients could perfectly name their treatment and 36% knew all the indications.

Conclusion Knowledge of treatment representation and beliefs are central to understanding patient behaviour. Considering patients' representations will allow the identification of levers, and the development of actions and educational tools adapted to improve their adherence, their knowledge and therefore their drug management.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study is pioneering in its examination of the representation and beliefs associated with chronic treatments within a vascular medicine and surgery department.
⇒ We employed validated and widely accepted questionnaires to assess beliefs and measure medication adherence.
⇒ Nonetheless, it is crucial to acknowledge that this study was conducted at a single centre, which may limit the broader applicability of the findings.
⇒ It is worth noting that medication adherence questionnaires often tend to overestimate adherence, underscoring the importance of employing multiple measurement methods.

INTRODUCTION

A chronic disease can be defined as a long-term condition that usually progresses slowly and requires long-term treatment and care.[1] It is also characterised by its impact on the quality of life of patients. About 20 million people in France are affected by a chronic disease,[1] the most frequent being cardiovascular, cerebral, respiratory and metabolic diseases, as well as malignant tumours.[2] Today, the prevalence of chronic diseases is rising sharply and can be explained by the ageing of the population and the increase in life expectancy. Therefore, they are among the most common healthcare problems, with a major impact on public health and the economy.[3]

In the vascular medicine and surgery department, the majority of patients have one or more chronic diseases and are polymedicated.[4] Polymedication is defined as 'the administration of many drugs simultaneously or the administration of an excessive number of drugs'.[5 6] Furthermore, all chronic diseases require long-term management with an investment by both healthcare professionals and the patient. For this, a good level of information on the disease and treatments is necessary for the patient to avoid the risks of poor compliance. According to the WHO,[7] 50% of patients do not adhere to their chronic treatment, even though this adherence is essential for the control of the chronic disease. Indeed, loss of adherence to treatment leads to a decrease in therapeutic efficacy and exposes the patient to complications of their disease and to therapeutic failure.[7]

The representations of treatments are factors that influence therapeutic adherence.[8] This refers to each individual's knowledge, explanations and ideas about his disease. Representations are linked to the patient's behaviour, cultural, social and family background, education, professional activity, etc.[9] They have multiple origins and varies from one individual to another. Today, the representation of the disease, but also of treatments, is central to understanding the behaviour of patients in their healthcare journey. Representations and beliefs have been studied in certain chronic diseases, notably HIV, diabetes, hypertension, asthma, etc.[9–12]

However, to our knowledge, they have not been studied in a vascular medicine and surgery department fields, when it comes to hospitalised patients with multiple medications.

The main objective of this study was to evaluate the beliefs and representations of chronic treatments in multimedicated patients hospitalised in a vascular medicine and surgery department Second, the patients' knowledge of their treatments, the importance given by the patient to each of their treatment and the medication adherence were assessed.

MATERIAL AND METHODS

This was an observational, prospective, single-centre study conducted in a French tertiary hospital centre of around 3000 beds in 9 institutions.

Patients included had to be over 18 years of age and hospitalised in the vascular medicine and surgery department, which comprises 28 beds. Patients had to be polymedicated prior the hospitalisation. Drawing on literature data[5] and the experience of our medication reconciliation activity, the threshold of five medications as a reference to designate polymedicated patients was established.

Patients who were unable to participate in an interview because of cognitive impairment or language barrier were not included. All patients underwent a medication review on admission to the vascular medicine and surgery department to obtain a complete record of their usual treatment. The patient inclusion period was from early March 2022 to late June 2022. All participants provided oral consent.

The study was based on three questionnaires completed during the patient's hospitalisation. All questionnaires were administered by the interviewer and concerned the treatments patients were taking prior to hospitalisation.

(1) A global questionnaire, specifically developed for the study, regarding the patient's sociodemographic data, their usual treatments identified by the reconciliation and their medication management, the information received about his treatments, the knowledge he had of his treatments (name and indication) as well as the importance he gave to each medication (scored from 1 to 10).

(2) The Belief Medical Questionnaire (BMQ): It allows for the evaluation of different specific dimensions of patients' beliefs about their medical treatments. It consists of 18 items divided into 2 parts: specific beliefs (patients' representations of their medical prescriptions—10 items) and general beliefs (beliefs in medicine in general—8 items). A 5-point Likert scale was used for the responses. For each question, a total score was calculated by adding the item scores. Each specific belief could get a score between 5 and 25, and each general belief a score between 4 and 20. The higher the scores, the more important the beliefs are. For specific beliefs, a differential score is calculated by subtracting the specific concern from the specific need. A score greater than 0 means that the perceived need for treatment is greater than the concerns. The validated French version of this questionnaire was used.[10]

(3) The validated GIRERD medication adherence questionnaire composed of six items.[13] GIRERD score: 6 negative ('no') responses: patient is 'good adherent'; 4 or 5 'no' responses: patient is 'low adherent'; 2 or 3 'no' responses: the patient is 'non-adherent'.

The interviews were conducted by the first author.

Characteristics of the patients and the drugs were presented with mean, SD, minimum and maximum for the quantitative variable and with frequency and percentage of each category. Spearman's correlation coefficient was used to measure association between two continuous variables. Comparison of groups was performed using χ^2 tests for categorical variables and using analysis of variance, or Kruskall-Wallis tests for continuous variables, depending on the normality or not of the distribution. The statistical significance was established with a threshold to 5%. All analyses were performed by using SAS V.9.4 software.

Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

RESULTS

Characteristics of the patients and their treatments

Over the period, 365 patients underwent a medication reconciliation. Of the patients eligible and available at the time of service, 100 patients were included in the study. All patients completed the study and were analysed. The characteristics of the patients and their treatments are presented in online supplemental table 1. Patients reported being treated for an estimated period of 19.4(± 12.4) years. On average, 9.4 (± 3.6) drugs were prescribed simultaneously, mostly for cardiovascular (32%), digestive (19.8%) or neurological (18%) diseases. The majority of patients were informed about their treatments by a doctor, but more than a quarter (27%) felt the need for more information.

Women felt that they received less information about drugs from healthcare professionals than men (48.4% vs 71.0%, p=0.0292).

Beliefs

The results of the BMQ questionnaire for the population are presented in figure 1 and the BMQ score values are detailed in table 1. Overall, patients said that their medication helped them not to feel worse, that without it they would be sicker or that their life would be impossible. They were aware that their future life depended on taking them. However, almost one in three patients felt that doctors were too trusting of medication, and that they would prescribe less if they had more time. The BMQ scores clearly show that the balance of benefits and risks perceived by the patients is clearly in favour of taking the treatments for 96% of them.

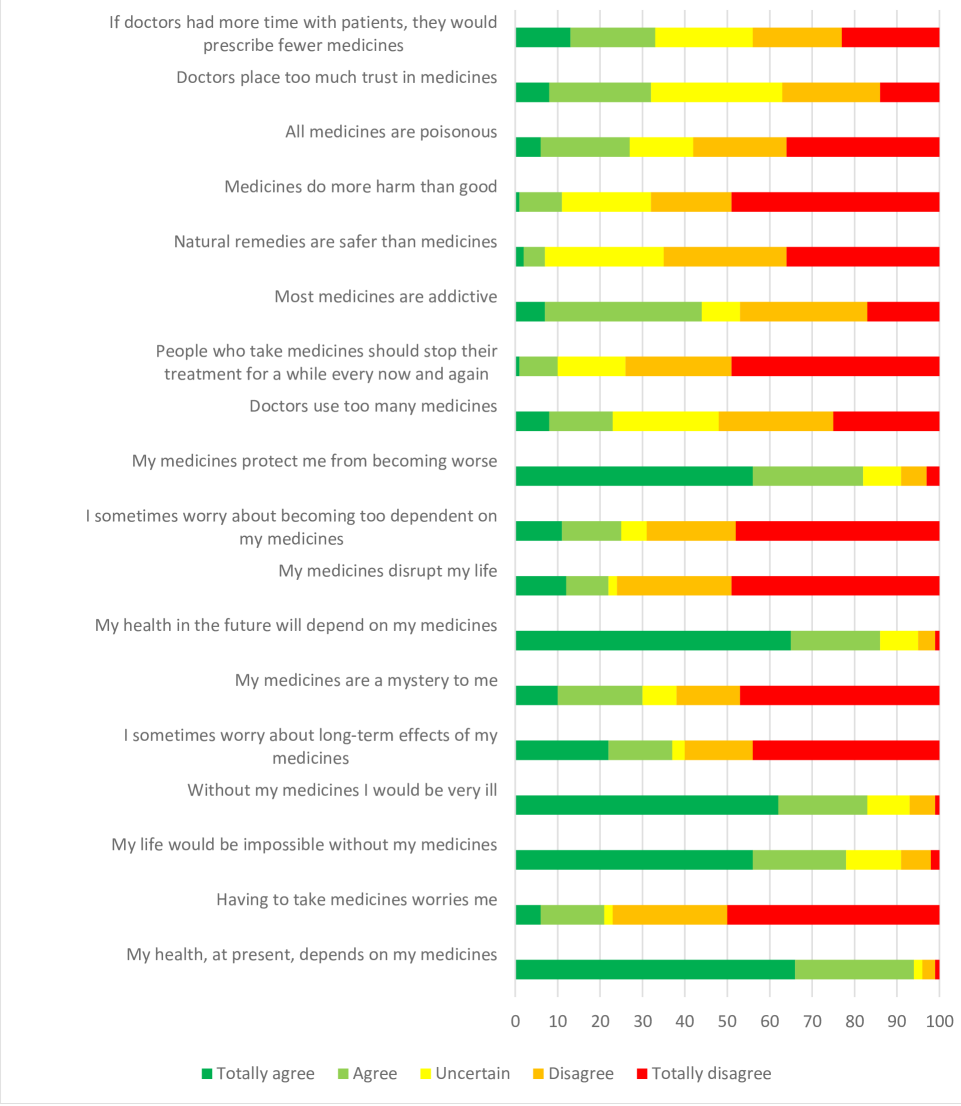

Figure 1 Responses to the BMQ questionnaire (percentage of responses among the 100 patients). BMQ, Belief Medical Questionnaire.

Table 1 BMQ score results—beliefs

BMQ—beliefs	N=100	Male N=69	Female N=31	P value
Specific beliefs—necessity	21.9±3.5 (8.0;25.0)	21.7±3.6	22.2±3.1	0.4822
Specific beliefs—concerns	11.1±4.8 (5.0;23.0)	10.5±4.4	12.5±5.5	0.0509
General beliefs—harm	9.1±3.2 (4.0;17.0)	8.6±3.0	10.1±3.5	**0.0352**
General beliefs—overuse	10.3±3.4 (4.0;17.0)	9.8±3.4	11.5±3.3	**0.0170**
BMQ necessity—BMQ concern>0*	96 (96.0%)	66 (95.7%)	30 (96.8%)	1.0000

Results are presented as mean±SD (minimum–maximum) or frequencies and percentages.
Specific belief scores range from 5 to 25 and general belief scores range from 4 to 20. A high score indicates a strong belief.
Values corresponding to statistically significant results are in bold.
*BMQ 'necessity'—BMQ 'concern'>0 means that the beneficial character is superior to the worrying character.
BMQ, Belief Medical Questionnaire.

The more medications patients took, the more they believed in the importance of their treatment (r=0.27, p=0.0064). Women believed more in the harm of treatments (p=0.0352) and in the overuse of drugs than men (p=0.0170)

Compliance

The responses to the GIRERD questionnaire are presented in table 2. Only 11% of patients had good medication adherence with their treatments according to the questionnaire score. One in 10 was considered totally non-adherent.

The more a good medication adherence patients have, the more they believed in the importance of their medication (p=0.0039).

No significant association was found between the level of medication adherence and age (p=0.50), level of education (p=0.52) or number of medications (p=0.0733).

Knowledge

On average, patients were able to name 49.3% of their treatments. Sixteen per cent of patients could name all of their treatments, while 11% of patients could not name any of their treatments.

On average, patients knew 73.1% of the indications for all their usual treatments. When 32 patients were able to name all the indications of their medication, 3 patients could not name any.

Table 2 Responses to the GIRERD questionnaire and correlations between compliance and beliefs (N=100)

Questions and no of positive responses				N (%)
Did you forget to take your medication this morning?				1 (1.0)
Since your last visit, have you run out of medication?				7 (7.0)
Have you ever taken your medication late compared with the usual time?				43 (43.0)
Have you ever not taken your medication because your memory fails you some days?				23 (23.0)
Have you ever not taken your medication because some days you feel that your medication is doing you more harm than good?				9 (9.0)
Do you think you have too many pills to take?				61 (61.0)
	Good adherent N=11 (11.0%)	**Low adherent** N=79 (79.0%)	**Non-adherent** N=10 (10.0%)	P value
Specific beliefs—necessity	21.0 (18;25.0)	23.0 (21.0;25.0)	23.0 (16.0;24.0)	0.6487
Specific beliefs—concerns	9.0 (6.0;12.0)	11.0 (6.0;14.0)	17.0 (9.0;20.0)	0.1163
BMQ necessity—BMQ concern>0*	11 (100.0%)	78 (98.7%)	7 (70.0%)	**0.0039**
General beliefs—harm	9.0 (6.0;12.0)	8.0 (6.0;11.0)	11.5 (9.0;15.0)	0.0739
General beliefs—overconsumption	8.0 (5.0;12.0)	10.0 (8.0;13.0)	13.0 (9.0;16.0)	0.1086

The results are presented in median (first quartile; third quartile) for quantitative variables and in the form of frequencies (%) for qualitative variables.
Specific belief scores range from 5 to 25 and general belief scores range from 4 to 20. A high score indicates a strong belief.
Values corresponding to statistically significant results are in bold.
*BMQ 'necessity'—BMQ 'concern'>0 means that the beneficial character is superior to the worrying character.
BMQ, Belief Medical Questionnaire.

Several correlations were found, notably between age and patient knowledge (online supplemental table 2), but also with educational level. Indeed, patients with higher education knew more about the indications of their treatments (mean=85.1±22.8) than patients with no education (mean=40.9±29.4) (p=0.0017).

The least cited drug classes were antihistamines for systemic use (28.6%), analgesics (26.8%), antianaemic preparations (24.0%) and ophthalmic drugs (20%).

Among the most prescribed drug classes, the most cited were antithrombotics (64.7% of the 116 prescriptions), beta-blockers (55.9% of the 59 prescriptions), drugs acting on the renin angiotensin system (49.3% of 67 the prescriptions) and antidiabetics (46.8% of the 62 prescriptions).

The drug classes for which patients demonstrated inadequate knowledge regarding their indications primarily included cardiology drugs (60%), antianaemic preparations (48%), diuretics (47.5%), beta-blockers (45.8%) and lipid-lowering drugs (45%).

When patients were asked about their treatments, a large proportion did not spontaneously mention the drugs they took 'if needed', in particular analgesics (26.8% of the 82 prescriptions) such as paracetamol or symptomatic drugs such as antihistamines (28.7% of the 14 prescriptions).

A comparison between beliefs, compliance and knowledge was made. The results obtained are detailed in table 3. For patients with low adherence, the more they knew the indications of their treatments, the less they feared their harmfulness. And the more they knew how to name treatments, the less they feared overuse.

Importance ratings

Fourteen patients were unable to rate the importance of their treatment because they felt that all their medications were equally important.

Out of the most prescribed drug classes, 2 had a median importance score of less than 6: nasal preparations (3 prescriptions, median score 5.0) and constipation medications (13 prescriptions, median score 5.5). Those with the highest importance scores were antidiabetics (62 prescriptions, median score 9.5), immunosuppressants (10 prescriptions, median score 10) and antithrombotics (116 prescriptions, median score 9).

Symptomatic medications scored high in importance. Analgesics (82 prescriptions), antihistamines (14 prescriptions) and medications for acid-related disorders (52 prescriptions) all received a median score of 8.

There was no significant correlation between median patient ratings and compliance (r=−0.13, p=0.3623).

DISCUSSION

Our study showed that patients perceived their treatments as beneficial rather than worrying. A correlation between medication adherence and beliefs was observed. 'Non-adherent' patients had a more negative overall perception of medication compared with 'adherent patients'. The level of medication adherence and knowledge of our patients was low. Only 11% of the patients had 'good medication adherence', 16% of the patients could perfectly name their treatment and 36% knew all the indications.

In recent years, several studies have assessed treatment representations and their influence on medication adherence. However, to our knowledge, this study is the first to examine patients' beliefs about their chronic treatment

Table 3 Correlation between adherence, beliefs and knowledge about their treatments for the 100 patients

	Beliefs	Drugs mentioned		Known indications	
		r	P value	r	P value
Good adherent (N=11)	Specific beliefs—necessity	−0.22	0.5220	0.17	0.6185
	Specific beliefs—concerns	−0.01	0.9837	−0.11	0.7403
	General beliefs—harm	0.07	0.8488	0.15	0.6686
	General beliefs—overuse	0.37	0.2651	0.26	0.4422
Low adherent (N=79)	Specific beliefs—necessity	0.01	0.9540	−0.07	0.5457
	Specific beliefs—concerns	−0.12	0.2994	−0.11	0.3491
	General beliefs—harm	−0.21	0.0689	−0.30	**0.0069**
	General beliefs—overuse	−0.23	**0.0401**	−0.21	0.0630
Non-adherent (N=10)	Specific beliefs—necessity	−0.35	0.3216	−0.43	0.2149
	Specific beliefs—concerns	0.41	0.2434	0.44	0.2064
	General beliefs—harm	0.21	0.5643	0.57	0.0858
	General beliefs—overuse	0.38	0.2726	0.47	0.1677

Values corresponding to statistically significant results are in bold.

in relation to their knowledge and medication adherence in a vascular medicine and surgery department.

Our results regarding the importance attributed by patients to their chronic medication are consistent with the data found in the literature. French studies have evaluated the representation of treatments in chronic pathologies, particularly in asthma,[12] diabetes and HIV,[10] and bronchopulmonary cancer.[14] All these studies have highlighted the importance that patients attach to their medication. Therefore, patients perceive their treatment as beneficial rather than worrisome. Indeed, in our study, 77% of patients were not worried about taking medication and 76% were not disturbed by medication in their daily lives.

Several studies have demonstrated a correlation between patients' representations of their treatment and the level of medication adherence. Horne and Weinman established this link for each of the chronic pathologies studied via the BMQ questionnaire in a cohort of 324 patients with diverse chronic diseases (asthma, oncology, cardiac and renal diseases). Indeed, the 'necessity' score was correlated with good medication adherence and the 'concern' score was related to poor medication adherence in each of the diseases studied.[11] Although our results could not show a significant correlation but a trend towards the same result. Conducting disease-specific analyses with larger sample sizes could confirm this trend.

A French study also explored correlations between beliefs and medication adherence among patients with chronic diseases in general medical practices.[15] Of the 265 patients included in the study, 40.8% had good medication adherence, 53.2% were 'moderately adherent' and 6% were 'non-adherent'. In our study, only 11% of patients were 'good adherent'. This can be partially explained by a significant difference in the average number of medications taken by patients. In their study, patients had an average of 3.6±2.6 medications, almost three times less than in our study. One of the six questions of the GIRERD questionnaire related to the amount of medication to be taken: 'Do you think you have too many pills to take' and 67% of our patients answered 'yes'. This may explain the low rate of 'good adherent'.

Deat *et al* highlighted a significant correlation between the degree of adherence and the BMQ scores'concerns', 'harmfulness' and 'overuse', supporting the trend shown in our study.[15] The absence of a statistical significancy could be explained by an important difference in the number of patients in each compliant group. Only 10 patients were 'non-adherent'. Regarding the concerns of 'non-adherent' patients, our results are consistent with their study: patients were more concerned with their treatment, which may have an impact on medication adherence.

Fall *et al* conducted a study among patients with diabetes and HIV.[10] A disease-specific analysis demonstrated significant correlations between medication adherence and the necessity and worry scales. Thus, negative beliefs were predictive of poor adherence. 'Non-adherent' patients would, therefore, have a more negative overall view of medication than adherent patients.

According to the study by Huon *et al*,[16] the average number of medications taken by the elderly is 8 in the 70–80 years, 9.61 in the 80–90 years, 9.92 in the 90–100 years and 8.11 for the over 100 yeas. Overall, the increase in medication use varies as the population ages. Our patients, with an average age of 70.8 years, took an average of 9.7 medications. Unfortunately, the higher the number of medications, the higher the risk of forgetting or not taking the treatments.[17] This high number of medications also has a role in patients' knowledge and beliefs. Our results demonstrated that the more medications patients took, the less they knew about their names and indications. These results are consistent with those reported in the literature.[18]

One study showed that knowledge of drug indications varied based on the Anatomical Therapeutic Chemical (ATC) classification. Indeed, the drug classes where indications were not known included cardiovascular drugs (12%), asthma drugs (5%) and oestrogen therapies (5%).[19] In our study, we also noted that indications for cardiovascular drugs were the least known. This observation aligns with the fact that patients in the vascular medicine and surgery department have many cardiology medications. It is therefore essential that caregivers take sufficient time with patients to educate and involve them in their care. Persell *et al*[19] also revealed that the older and less educated the patients were, the less they knew about their treatments. Our results support these findings.

Only 16% of patients could perfectly name their treatment and 36% knew all the indications. In general, the level of knowledge of patients about their treatment was low. However, comparing our results to existing literature is challenging due to disparities in the number of drugs per patient and the number of patients included. Akici *et al*[20] showed, in a study including 1618 patients with an average of 3.3 drugs per patient, that only 10.9% of patients could correctly name their treatment. Given the average number of medications taken by the patients in our study, over 9, it seems normal that the number of patients who could cite their entire treatment is low in our results. The study by Haidar-Ahmad including 351 patients, with a mean number of medications taken of 3.83, described that 80.74% of the medications were known by the patients.[21] Persall *et al* included 616 patients in their study. Only 13.5% of patients did not know any of the indications. They also noted a significant lack of knowledge of their patients for cardiovascular medications.[19]

Although patient knowledge levels and medication adherence were low, the importance they attached to their treatment was high. Patient ratings indicated that the majority of prescribed drug classes were considered important to them. Only four ATC classes scored below average. This outcome confirms the 'necessity' score obtained in the BMQ questionnaire. A French study assessed drug-related representations in patients with multiple myeloma.[22] The authors estimated the

importance the patient placed on his or her medications. Antithrombotic drugs, unlike our study, were rated lower, whereas anticancer drugs scored highest. This significant difference between medications that are all part of the overall management of myeloma could be explained by the degree of information provided to patients. Indeed, while the direct link between anticancer drugs and myeloma can easily be made, the link between antithrombotic drugs and the fatal consequences of myeloma is less intuitive. Our work reports on patients with multiple and varied chronic pathologies, with a large number of prescribed medications. Despite this, few differences were observed between ATC classes and therefore chronic pathologies. For a majority of patients, all treatments carried equivalent importance. Indeed, even if the patients did not spontaneously cite their symptomatic treatments, they gave them a high importance. This is due to the perceived immediate effect of using these treatments. This finding is in alignment with another study[23] which demonstrated that patients exhibited greater familiarity with analgesics compared with cardiovascular drugs, as they could directly sense their effects. Notably, in our study, patients were very familiar with the effects of their symptomatic medications but did not cite them directly. This individual perception of treatment efficacy has been described as a determining factor in patient adherence to medication.[24]

Moreover, if representations about treatments impact patient adherence, adherence is also determined by the relationship of trust with the physician. Several studies have shown that the relationship between the physician and the patient has a significant impact on the feeling of usefulness and efficacy of the treatment, but also on adherence.[25] Research has indicated that patients exhibit improved medication adherence when they possess sufficient information and a clear understanding of the rationale behind their treatment.[26] As described by Peh *et al* in their study, various factors contribute to therapeutic adherence, including healthcare professionals. For them, medication adherence depends on patients' perceived needs and beliefs about medication, which are, in turn, influenced by the information and advice provided by the healthcare provider during the medical consultation.[27] In our study, the majority of patients reported receiving information about their treatment, but one-third felt that this was not sufficient.

In our study, we were interested in the link between beliefs and adherence. Nevertheless, therapeutic adherence represents a multifaceted behaviour shaped by a multitude of factors; factors linked to the patient (age for example, beliefs), to the care team (information), to the disease (asymptomatic or symptomatic), to the treatment (undesirable effects or not), and to social and economic factors.[24 27] A better information would mean a more effective and safer treatment for the patient. Consequently, this perception aids in optimising their medication-taking behaviour over an extended period.[24]

Assessing patients' beliefs would allow us to better target their priorities, and thus to develop adapted educational actions and tools. Indeed, understanding the mechanisms and potential evolution of the disease will make it easier for patients to assimilate the objectives of their treatments and will facilitate their therapeutic adherence.[28]

Strengths and biases

To our knowledge, the representation and beliefs of chronic treatments have not been studied in a vascular medicine and surgery department, in patients with multiple medications and cardiac pathologies. This is a single-centre study. It would be of interest to replicate this investigation across multiple centres to achieve outcomes that are both generalisable and transferable.

In our study, the BMQ was used for a combination of several diseases, whereas its French version has only been validated for diabetes and HIV.[10] Thus, patients with several chronic diseases may not have the same representations regarding the treatments for each disease. The scores given by patients on each of their treatments were used to estimate the level of importance given to each medication. Notably, a predominant observation was that for the majority of patients, all their prescribed medications were perceived as equally significant, potentially indicating an absence of prioritisation.

Another limitation inherent in our study pertains to the exclusive utilisation of a questionnaire to assess adherence, despite the availability of various adherence measurement methods (both direct and indirect). While the questionnaire presents a straightforward, swift and cost-effective technique, its stand-alone use is less robust. Many authors recommend using at least two methods. In addition, the use of questionnaires tends to overestimate medication adherence[29] which may seem worrying in view of the already low adherence reported in our results. In the context of short-stay inpatients, it was not possible to use direct methods (drug measurements, biological marker measurements), or to use any other indirect method than the questionnaire. Moreover, this would have lengthened the interview time with the patients and thus made the procedure more cumbersome.

Concerning the evaluation of knowledge, the hospitalisation of our population certainly had an impact on the real knowledge of the patients about their treatment. In discussion with the doctors, we reached this limit in our study. Being in a stressful environment, in a context of acute pathology, could potentially have decreased their true knowledge of the names and indications of their treatment, inducing a bias.

One of the exclusion criteria for the study was cognitive impairment. This was assessed clinically but was not confirmed by a specific assessment test such as Mini Mental State Examination. This would have again made the protocol and interviews more cumbersome.

CONCLUSION

The level of knowledge and medication adherence of patients with multiple chronic diseases in the vascular medicine and surgery department is low. Representations of the disease and of medication have an impact on patients' behaviour. They are determinants of adherence to medication. Identifying patients' beliefs about their chronic treatment allows caregivers to adapt information to patients' needs. Better information from healthcare professionals (physician, nurse, pharmacist, etc) regarding the indication and efficacy of the prescribed treatment is essential. Combined with the consideration of patients' concerns, particularly regarding tolerance, this will improve the benefit/concern ratio perceived by these patients, and thus increase their compliance. The BMQ may help to identify patients at risk of poor compliance.

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