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Difficult patient–doctor encounters in a Swiss university outpatient clinic: cross-sectional study

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ABSTRACT

Introduction Previous research has shown that multiple factors contribute to healthcare providers perceiving encounters as difficult, and are related to both medical and non-medical demands.

Aim To measure the prevalence and to identify predictors of encounters perceived as difficult by medical residents.

Design and setting Cross-sectional study at the Department of Ambulatory Care and Community Medicine (DACCM), a university outpatient clinic with a long tradition of caring for vulnerable patients.

Method We identified difficult doctor–patient encounters using the validated Difficult Doctor–Patient Relationship Questionnaire (DDPRQ-10), and characterised patients using the patient's vulnerability grid, a validated questionnaire measuring five domains of vulnerability, both completed by medical residents after each encounter. We used a multiple linear regression model with the outcome variable as the DDPRQ-10 score, controlling for resident characteristics.

Participants We analysed 527 patient encounters performed by all 27 DACCM residents (17 women and 10 men). We asked each medical resident to evaluate 20 consecutive consultations starting on the same date.

Outcome One hundred and fifty-seven encounters (29.8%) were perceived as difficult.

Results After adjusting for differences among residents, all five domains of the patient vulnerability grid were independently associated with a difficult encounter: frequent healthcare user; psychological comorbidity; health comorbidity; risky behaviours and a precarious social situation.

Conclusion Nearly a third of encounters were perceived as difficult by medical residents in our university outpatient clinic that cares for a high proportion of vulnerable patients. This represents twice the average ratio of difficult encounters in general practice. All five domains of patient vulnerability appear to have partial explanatory power on medical residents' perception of difficult patient encounters.

Strengths and limitations of this study

► Cross-sectional study with data on 527 patient–doctor encounters.

► Specific setting, the Lausanne Department of Ambulatory Care and Community Medicine . This is a university outpatient primary care clinic with a long tradition of caring for vulnerable patients.

► Data from all 27 residents at final years of their specialty in internal and general medicine working in our institution.

► This is a single-centre study with residents from a single specialty.

► Another limitation of the study is the lack of multi-informants regarding the dependent variables and patient characteristics.

not sufficiently explicate their fundamental nature and origins.[4,5] The 'difficult patient' category exacerbates this distortion, reinforcing only one side of a complex issue.[3,5,6] To place the emphasis on difficult relationships and encounters, rather than to difficult patient, some research has been done to investigate further the factors that contribute to encounters perceived as difficult by healthcare workers. For example, in one study with 500 patients, 15% were identified 'difficult' by their primary care providers and these patients were more likely to have mental disorders, more than five somatic symptoms, more severe symptoms, poorer functional status, decreased satisfaction with care and higher use of health services.[1]

Factors contributing to these difficult clinical encounters may relate to physicians, patients, clinical situations or some combination of all three. Common physician factors could include negative bias toward specific health conditions, poor communication skills, situational stressors and physician's personal stress management.[7] Physicians involved in difficult encounters are usually less experienced.[1,6] Patient factors may include personality disorders, multiple and

INTRODUCTION

Nearly one in six outpatient visits (16%) in ambulatory primary care is considered difficult by clinicians.[1–3] Although the literature provides an analysis of the general characteristics of challenging encounters, it does

poorly defined symptoms, non-adherence to medical advice and self-destructive behaviours. Situational factors include time pressures during visits, patient and staff conflicts, or complex social issues.[6–8] To better manage difficult clinical encounters, the physician needs to identify all contributing factors.

Our study takes advantage of a specific setting, the Lausanne Department of Ambulatory Care and Community Medicine (DACCM). This is a university outpatient primary care clinic founded in 1887 with a long tradition of caring for vulnerable patients. At the time of this study, 27 medical residents in general medicine were working in our institution supervised by 12 chief residents and 6 senior doctors. Our main objective was to determine the prevalence of encounters perceived as difficult by medical residents and to identify predictive factors of a difficult encounter.

METHOD

We conducted a cross-sectional study from June to August 2017 at the DACCM at the Lausanne University Hospital, Switzerland. The number of annual consultations of our institution is around 20 000 (18 304 scheduled consultations in general medicine in 2016). To obtain a representative and random sample, we asked each medical resident to evaluate 20 consecutive consultations starting on the same date.

A 27 medical residents accepted to participate to the study. All names and medical resident information were codified. From the study starting date, after each medical consultation, the medical residents completed two questionnaires: the 10-item Difficult Doctor Patient Relationship Questionnaire (DDPRQ-10) and the patient's vulnerability grid (PVG). The pretest phase showed an average of 3 min to complete the questionnaires. Physician perception of difficult encounters was measured using the DDPRQ-10.[9 10] We used the English validated version of the DDPRQ-10. The DDPRQ-10[9 10] is a scale that is completed by physicians after their encounter with patients and assesses the degree of difficulty in the encounter.

Characterising vulnerable patients or populations is challenging.[11] The patient vulnerabilities were assessed applying a conceptual framework of patient's vulnerability elaborated in our institution. We used the PVG, which has five dimensions of vulnerability (see table 1) and was filled by the medical resident. Using a conceptual framework of patients' vulnerability, and previous research, showed that a patient, who presents at least one characteristic in three different dimensions, could be considered as a 'vulnerable patient'.[12 13]

To examine potential risk factors for a difficult encounter related to patient vulnerability, we used a multiple linear regression model. The outcome was the DDPRQ-10 as a continuous outcome. Differents predictive variables were included: resident's age, resident's years of practice, specialty targeted by the resident and of patients' vulnerabilities (mental health, social, risky behaviour, mental health and somatic vulnerabilities) included as a binary variable (yes/no) if patient had at least one characteristic for each dimension of vulnerability. We performed an ad-hoc separate analysis to investigate gender differences. All statistical analyses were performed using R (V.3.3.2) and SPSS (V.17) packages.

Patient and public involvement

Patients and or public were not involved in this study. All data come from medical doctors who received a participant information sheet before the study started and gave their consent to participate.

RESULTS

All 27 residents working in DACCM at the time of the study participated. We gathered data on 527 encounters. One hundred and fifty-seven encounters (29.8%) were perceived as difficult. Mean DDPRQ score for encounters not perceived as difficult was 28.4 (SD 5.1) and the mean for the encounters perceived as difficult was 35.7 (SD 6.5) where a final DDPRQ-10 ≥30, the encounter is perceived as difficult.

The median (IQR) age of residents was 32 years (30–35). The median (IQR) years of training was 4 years (3.5–5.5). Residents are 17 women and 10 men and there were significant gender differences. In an unadjusted comparison, women gave higher overall scores on the DDPRQ-10, with a mean 31.5, SD 6.5 as compared with

Table 1 Patient's vulnerability grid: five dimensions of vulnerability.[12]

Somatic determinants	Mental health state	Behavioural determinants	Social determinants	Healthcare use
1. Severe acute or chronic disease 2. Somatic polimorbidity 3. Complex drug treatment 4. Inadequate treatment or follow-up adhesion 5. Pregnancy and neonatal period 6. Restricted mobility/physical disabilities	1. Psychiatric polimorbidity 2. Mood disorder 3. Anxiety disorder 4. Psychotic disorder 5. Personality disorder 6. Somatoform disorder 7. Post-traumatic stress disorder 8. Dementia 9. Psychological development disorder	1. Substance abuse active addiction 2. Risky behaviour 3. Issues related to contraception or abortion 4. Physical or psychological violence 5. Risk or threatening situation for a child	1. Complex or difficult family situation 2. Social isolation or exclusion 3. Complex or difficult financial situation 4. No or inadequate housing 5. No or insufficient insurance 6. Difficulties or absence from work/school/social activities 7. Precarious legal residence status 8. Difficulties of communication/language barrier	1. Frequent user. Multiple caregivers 2. No outpatient primary care physician 3. Difficulties in the relation with caregivers

Table 2 Explicative variables for women on Difficult Doctor–Patient Relationship Questionnaire score. General linear model to 95% confidence controlled by medical resident

Variables	Adjusted regression coefficients	P value
Somatic (six domains)	0.72	0.00
Mental health (nine domains)	1.53	0.00
Risky behaviour (five domains)	1.66	0.01
Social (eight domains)	0.93	0.00
Healthcare use (three domains)	2.56	0.00

men, with a mean 29.1, SD 6.3 (p=10–5). We performed an ad-hoc separate analysis for women and men explicative factors for an encounter perceived as difficult (see tables 2 and 3).

We also analysed the frequency of difficult encounters by the day of the week that occurred (see figure 1). Difficult encounters occurred mainly on Mondays, followed by Thursday, Friday, Wednesday and Tuesday. Monday is the day of the week when the perception of difficulty is higher and the differences are statistical significant (p=0.0002).

Using the PVG, the number of vulnerable patients who presented at least one vulnerability in three different dimensions was 212 (40%). The majority of vulnerabilities were social, followed by somatic and mental health determinants. The majority of patient's presenting social vulnerabilities had more than two different types of social vulnerabilities at the same time. The overall number of different vulnerabilities found for each dimension is described in table 4.

After adjusting for differences among residents, the explicative factors for a difficult encounter, as a continuous outcome included all patient vulnerabilities studied through the PVG (see table 5). Physician age (p=0.622), gender (p=0.648) and number of years of practice

Table 3 Explicative variables for men on Difficult Doctor–Patient Relationship Questionnaire score. General linear model to 95% confidence controlled by medical resident

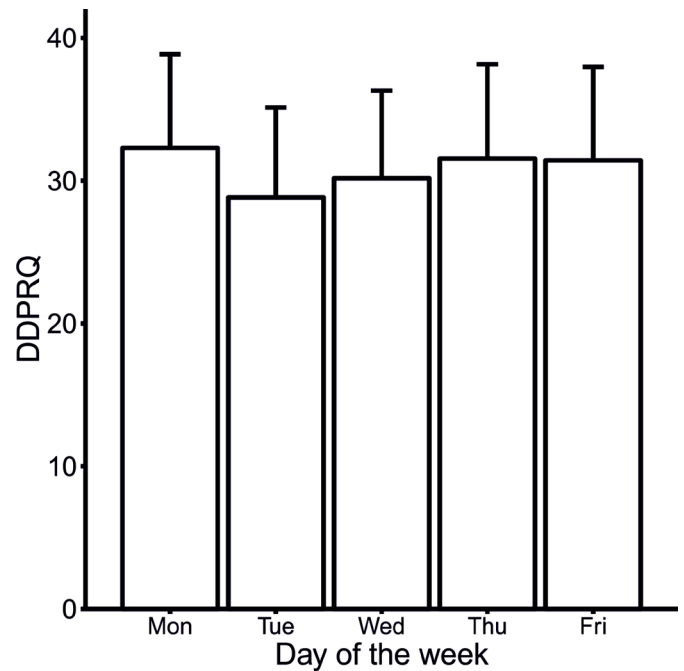| Variables	Adjusted regression coefficients	P value
Somatic (six domains)	1.18	0.01
Mental health (nine domains)	0.44	0.48
Risky behaviour (five domains)	1.73	0.04
Social (eight domains)	1.40	0.00
Healthcare use (three domains)	0.24	0.75

Figure 1 Frequency of difficult encounters by the day of the week. DDPRQ, Difficult Doctor–Patient Relationship Questionnaire.

(p=0.395) were not associated with the likelihood of rating patient encounters as difficult. The psychiatric comorbidity on the patient when present was the strongest associated with encounter perceived as difficult by medical resident, followed by risky behaviours by the patient, higher use of healthcare, somatic determinants and social vulnerabilities. All dimensions of vulnerability assessed were positively statistically associated with an increase of the perception of difficulty by medical residents. Patient's vulnerabilities were the only factors analysed associated with a perception of difficulty by medical residents.

DISCUSSION
Summary
In our institution—medical residents at the end of their specialty training and with a high proportion of vulnerable patients—residents experience near 30% of their patients as difficult. Patient's vulnerabilities were the only factors analysed associated with a perception of difficulty by medical residents.

Comparison with existing literature
Previous literature has shown that 15% of encounters are experienced as difficult or challenging by residents in primary care.[1 7] In our institution with a high proportion of vulnerable patients, we found that residents in their final years of their training had twice as many difficult encounters. Our findings are similar to those seen previously where ratios of 30% of encounters perceived as difficult were related to the presence of mental disorders, greater somatisation and higher healthcare utilisation by

Table 4 Number of vulnerabilities by dimension of the patient's vulnerability grid.

Number of vulnerabilities by dimension	0	1	2	3	4	5	6	7	8
Somatic	216 (41%)	162 (30%)	74 (14%)	55 (10%)	18 (3.5%)	2 (0.4%)	0	0	0
Mental health	297 (56%)	157 (30%)	44 (8%)	19 (4%)	10 (2%)	0	0	0	0
Risky behaviour	398 (76%)	115 (22%)	14 (3%)	0	0	0	0	0	0
Social	176 (33%)	139 (26%)	77 (15%)	50 (9%)	46 (9%)	20 (4%)	12 (2%)	4 (0.7%)	3 (0.6%)
Healthcare use	373 (70%)	132 (25%)	16 (3%)	6 (1%)	0	0	0	0	0
Total vulnerabilites	45 (8%)	109 (21%)	161 (30%)	128 (24%)	60 (11%)	24 (5%)	0	0	0

patients.[1 14 15] Difficult encounters may be attributable to factors associated with the physician, the environment or the patient.

We did not identify physician factors associated with difficult encounters. In contrast, previous literature has shown that younger physicians report higher levels of frustration with patients.[16] In this study, all physicians are residents but their mean age is 32 years old, older than residents in most other countries. They are all in the final years of their specialty training and almost all plan on becoming general practitioner (GP) doctors in the near future. We found significant gender differences, with women experiencing higher number of difficult encounters than men. The ad-hoc separate analysis for women and men explicative factors for an encounter perceived as difficult points out in the same direction, with women experiencing higher number of encounters than men. This gender difference was not expected during the study design and opens an area for future research.

Table 5 General linear model to 95% confidence controlled by medical resident

	Variables	Adjusted regression coefficients	P value
Residents	Gender (male, female)	−1.4968	0.649
	Age (years)	0.1896	0.622
	Years of practice (years)	0.8764	0.396
	Specialty targeted (after residency)	−3.2288	0.542
Patients	Healthcare use (three domains)	1.3422	0.005
	Social (eight domains)	0.5036	0.027
	Risky behaviour (five domains)	1.5160	0.025
	Mental health (nine domains)	2.3621	0.001
	Somatic (six domains)	0.7415	0.022

Contextual factors were not explicative factors for an encounter perceived as difficult. In this study, all residents were working in the same institution and had the same working schedule and conditions. Nevertheless, we find Mondays being day of the week with higher proportion of encounters perceived as difficult (to our knowledge, there is no other reference from the literature that has described this). For these reasons, working environmental factors or medical doctors' classical variables are likely almost homogeneous and we could focus on the impact of patients' vulnerabilities on the perception of encounter difficulty.

Patient's vulnerabilities were the only factors analysed associated with a perception of difficulty by medical residents. All dimensions of vulnerability assessed were positively statistically associated with an increase of the perception of difficulty by medical residents. Literature has shown that clinicians mention that difficult patients are not those with difficult medical problems[6 8 17] and patients with multiple non-specific complaints and those with psychosomatic problems are difficult for the family physician.[4 14] Many of the patients from our outpatient clinic present different medical and social vulnerabilities. Our results after controlling for medical resident characteristics shows that all patient domains of the vulnerability framework studied have partial explanatory power on the perception of difficulty. The psychiatric comorbidity variable is the strongest associated with an encounter perceived as difficult by residents, followed by risky behaviours, higher use of healthcare, somatic polimorbidity and social vulnerabilities variables.

Limitations of the study are inherent of a cross-sectional study where it is impossible to establish the temporal and causal relationship between explanatory variables and outcomes. The lack of multi-informants regarding the dependent variables and the residents reporting their perception of difficulty and patient's variables are also limitations of the study. In addition to that, the patient demographic characteristics were not included, and so could not be controlled for. Finally, this is a single-centre study among residents, and may not be representative of doctors in other settings or who are finished with their training.

Difficult encounters have been associated with greater patient distress, less patient satisfaction and increased

use of services.[1 5 11 15] Challenging clinical encounters are often frustrating and demoralising for residents and for patients.[18] Understanding factors behind these perceived as difficult consultations could allow the early detection of future difficult encounters. In order to address medical doctor's specific needs and decrease perception of difficulty, we advocate tackling vulnerabilities prior or during doctor–patient encounter to decrease perception of difficulty, stress and burnout in future GPs. In this sense, recognising what makes some patients difficult, identifying the special ethical problems arising in the care of the difficult patient, and responding therapeutically are the key elements.[15] We also advocate for an interprofessional learning[19] focus to share the management of complex patients in settings with higher rates of patients at psychosocial risk. Delivering learning tools and implementing social measures adapted to patient's characteristics could decrease the perception of difficulty by medical residents, improve consultations and thereby improve the health outcome for patients.

Implications for research and/or practice

In conclusion, residents in our clinic perceived twice as many of their patient encounters to be difficult as seen on average elsewhere. This increase is likely partially explained by a high number of vulnerable patients. To better manage difficult clinical encounters, the physician needs to identify all patients' vulnerabilities for the situation at the early stages to establish interdisciplinary work with social workers and community nurses to deal with non-medical issues. Prior identification of patient's vulnerabilities might help to attenuate residents' perception of difficulty by giving them tools to address non-medical issues.

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