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Original article

Interprofessional collaboration between general practitioners and psychiatrists in a French rural multi-professional health center: Assessment of doctors' needs and patients' expectations using a mixed methods approach

Collaboration interprofessionnelle entre médecins généralistes et psychiatres dans une maison de santé pluriprofessionnelle rurale française : évaluation des besoins des médecins et des attentes des patients par méthode mixte

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ABSTRACT

Background. – The effectiveness of interprofessional collaboration (IPC) in primary care is unclear. It may have health benefits for patients with cardiovascular or mental health problems. The increase in the prevalence of mental disorders (particularly depressive episodes) in France over the last decade will mobilize both primary care and mental health actors in the future. They have a vested interest in working together to meet the growing needs of the French population. A consultation-liaison with a private psychiatrist was tested over 4 years within a French multi-professional health center (MHC) located in a French rural town. The overall aim of the study was to assess the care needs of GPs and their patients who benefited from this IPC. A study using a mixed methods approach was carried out with the following specific aims: (1) the main objective of the quantitative study was to describe the reasons for referral to psychiatrist by GP. The secondary objectives were to describe the responses given by the psychiatrist and to estimate the association between reasons for referral and patients characteristics; (2) the main objective of the qualitative study was to explore how patients perceived the GP-psychiatrist IPC, and the collaboration they experienced in this MHC. The secondary objectives were to explore their actual experiences in the French mental health system and their perceived needs.
Methods. – A convergent parallel design study was set up by combining a retrospective cross-sectional study by analyzing data from the medical records of patients, a qualitative study using semi-directed individual interviews and a non-participant observation with volunteer patients, and an integrative analysis phase to mirror the results of the two substudies. The analysis of data from the quantitative study was descriptive, followed by multivariate logistic regression analyses. The analysis of data from the qualitative study was inspired by Grounded Theory. The target population was adult patients who had visited at least one GP in the MHC.
Results. – One hundred patients were included in the quantitative study (women: 65%, mean age: 47.2 years), who were seen by the psychiatrist in 117 consultations. Three types of request were made by GPs to the psychiatrist: therapeutic requests (83.7%), diagnostic requests (35.9%), and administrative requests related to work absence (4.2%). After adjustment, patients were more likely to be referred to the psychiatrist for a therapeutic reason if they had depressive or anxiety disorder (AOR = 4.46, 95% CI: 1.57–12.69). Patients with bipolar disorder were more likely to be referred for diagnostic advice (AOR = 10.59,

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95% CI: 1.88–59.72). The psychiatrist's response was mainly therapeutic (91.5%): pharmacological in 74.3% of cases and psychotherapeutic in 50.4%. A diagnostic response was given in 41.9% of consultations. Of these diagnostic responses, 48.9% were diagnostic confirmations and 22.4% were alternative diagnoses. Ten patients participated in the qualitative study. They perceived the GP as the coordinator of care and the psychiatrist as the expert. This pair, supported by other actors or approaches, guided the patient with a mental disorder towards holistic rehabilitation. Patients also found the organization of mental health care in France difficult to understand and inadequate (short consultations, too-long intervals between consultations). Four changes in this mental health care system were identified by patients as priorities: proximity and flexibility of mental health care, more interaction between mental health professionals and GPs, patient involvement in theIPC, and integration of other actors or approaches in care. GPs sought support from psychiatrists in situations of diagnostic or therapeutic uncertainty, and when mental health was interfering with work. GPs and their patients agreed that the first provider of mental health care should be the GP, and patients also felt that this IPC could improve emergency management.

Conclusions. – GPs in this MHC were involved in the mental health care pathway of their patients who recognized it. However, IPC remained necessary to obtain psychiatric expertise as a second resort in identifiable primary care situations.

Mots clés :
Relations interprofessionnelles
Médecins généralistes
Psychiatres
Soins primaires
Étude transversale
Recherche qualitative

RÉSUMÉ

Contexte. – La collaboration interprofessionnelle (CIP) entre acteurs français des soins primaires et ceux de la santé mentale est souvent décrite comme insatisfaisante. Une consultation-liaison avec un psychiatre libéral a été testée pendant quatre ans au sein d'une maison de santé pluriprofessionnelle (MSP) française. L'objectif général de l'étude était d'évaluer les besoins en soins des médecins généralistes et de leurs patients ayant bénéficié de cette CIP.

Méthodes. – Une étude par méthode mixte dite convergente parallèle a été mise en place en combinant : une étude transversale rétrospective par analyse des données des dossiers médicaux des patients ; une étude qualitative par entretiens individuels semi-dirigés avec des patients volontaires ; une phase d'analyse intégrative pour mettre en miroir les résultats des deux sous-études.

Résultats. – Cent patients ont été inclus dans l'étude quantitative. Trois types de demandes étaient formulés par les généralistes au psychiatre : demande thérapeutique (83,7 %), demande diagnostique (35,9 %) et demande administrative liée à un arrêt de travail (4,2 %). Après ajustement, les patients étaient plus susceptibles d'être référés au psychiatre pour une raison thérapeutique s'ils étaient atteints de troubles dépressif ou anxieux (ORA = 4,46 ; IC 95 % : 1,57–12,69). Les patients atteints de trouble bipolaire étaient plus susceptibles d'être référés pour des conseils diagnostiques (ORA = 10,59 ; IC95 % : 1,88–59,72). Les généralistes recherchaient ainsi de l'aide dans des situations d'incertitude diagnostique ou thérapeutique et lorsque la santé mentale interférait avec le travail. Dix patients ont participé à l'étude qualitative. Ils percevaient le généraliste comme le coordinateur des soins et le psychiatre comme l'expert. Les généralistes et leurs patients convenaient que le premier prestataire de soins de santé mentale devrait être le médecin généraliste. Les patients ont également estimé que la CIP pouvait améliorer la gestion des urgences.

Conclusions. – Les généralistes de cette MSP étaient impliqués dans le parcours de soins en santé mentale de leurs patients et ceux-ci le reconnaissaient. La CIP restait nécessaire pour obtenir une expertise psychiatrique en deuxième recours dans des situations identifiables de soins primaires.

1. Introduction

According to the World Health Organization, collaborative practice occurs when caregivers from different professions provide comprehensive services and work with patients, their families, and the community to achieve the highest level of care [37]. The effectiveness of interprofessional collaboration (IPC) in primary care is unclear, with mixed results [6,27,34]. It may have health benefits for patients with cardiovascular or mental health problems [5].

Mental disorders are among the most common reasons for consulting a general practitioner (GP) in France: their prevalence was 17.6% in 2011 [17]. The most frequent disorders were depressive disorder, anxiety disorder, sleep disorder and substance use disorder [17,23]. According to the literature, French GPs feel comfortable working independently and are confident in managing depressive and anxiety disorders [1,14,15,19,38,39]. To respond to the demand for support from GPs in other situations, French mental health stakeholders are organizing between the public sector (hospitals, outpatient specialized centers) and the private sector (clinics, psychologists, and psychiatrists). Twelve million French people out of a total population of 65 million suffered from at least one mental disorder in 2007 [9]. The increase in the prevalence of depressive episodes that began in France in 2010 will mobilize both primary care and mental health actors [20]. They now have a vested interest in collaborating to meet the growing needs of the French population, in a context of limited human resources.

Collaboration between a private psychiatrist and six GPs was tested over 4 years (between 2018 and 2022) in a multi-professional health center (MHC) located in a French town of around 2000 inhabitants. Before the study, there was only one psychologist and no psychiatrist in this rural town. The MHC was about 15 km away from the nearest private psychiatric practice or public psychiatric hospital. However, these were no longer able to treat patients referred by GPs in less than 3 months, except in emergencies. The private psychiatrist in the study worked in sector 1. In France, an agreement is made between the National Health

Fund and doctors. This agreement sets doctors' fees and the proportion of the cost that the National Health Fund will reimburse to the patient (often around 65–70%). The remainder may be paid by the patient or by private supplementary health insurance. Doctors who agree to apply the contracted rates are called sector 1 doctors. Doctors in sectors 2 and 3 are free to set their consultation fees: patients are reimbursed by the National Health Insurance Fund only up to the contracted rate, with the difference being the responsibility of the patient. The psychiatrist set up a monthly consultation-liaison in this MHC. Patients were referred by a GP for a one-off assessment. Some patients were rarely seen more than once by the psychiatrist. He then reported back to the GP by leaving a note in the computerized patient record and attending a medical consultation meeting with GPs. Although we did not calculate the average time between the GP's request and the consultation itself, it was estimated by the study psychiatrist to be between 0 (same day) and 4 weeks. This study was set up without any institutional impetus or direct public or private funding.

We wanted to answer the following research question: what care needs has this collaboration met from the perspective of GPs and patients? For patients, we also wanted to explore their expectations of the French mental health system. A study using a mixed methods approach was carried out with the following specific aims:

- the main objective of the quantitative study was to describe the reasons for referral to a psychiatrist by the GP. The secondary objectives were to describe the responses given by the psychiatrist and to estimate the association between reasons for referral and patient characteristics;
- the main objective of the qualitative study was to explore how patients perceived the GP-psychiatrist IPC, and the collaboration they experienced in this MHC. The secondary objectives were to explore their actual experiences in the French mental health system and their perceived needs.

2. Methods

The article was written according to Mixed Methods Article Reporting Standards (MMARS) guidelines [21]. A convergent parallel design study [11] was set up, combining (1) a retrospective cross-sectional study by analyzing data from the medical patients' records seen by the psychiatrist; (2) a qualitative study using semi-directed individual interviews with patients; and (3) an integrative analysis phase to mirror the results of the two substudies. Supplementary file S1 details the conduct of two substudies. The target population was adult patients who had visited at least one GP in the MHC. Minors or patients under legal protection were excluded.

2.1. Data collection in the quantitative substudy

The health data analyzed were collected by a trained student (LS) between 1st April 2018 and 28th February 2022. The outcomes were the reasons for referral by GPs to the psychiatrist (categorical variable with three modalities: therapeutic/diagnostic/administrative) and the answers given by the psychiatrist (categorical variable with four modalities: pharmacological/psychotherapeutic/diagnostic/administrative). The administrative reasons for referral were all related to work absence. In France, any work absence due to health requires a certificate signed by a doctor. The covariates were the following:

- patient characteristics at the time of the consultation: age as a continuous variable in years, then by age groups (5-category variable); gender (men/women); socio-professional category according to the French Institute for Statistics and Economic Studies (8-category variable); any psychotropic medication according to the Anatomical Therapeutic Chemical Classification including psycholeptics N05, psychoanaleptics N06, and others N07 (binary variable); reported use of tobacco, alcohol, cannabis, and other illicit psychoactive products (all binary variables); mental disorder suspected by the GP: depressive or anxiety disorder, bipolar disorder, work-related adjustment disorder, post-traumatic stress disorder, psychotic disorder, and substance use disorder (6-category variable);
- more than one visit to the study psychiatrist during the inclusion period (binary variable).

2.2. Data collection in the qualitative substudy

Data were collected from 23rd May 2022 to 13th July 2023. All interviews were audio-recorded and then transcribed using Microsoft Word. An initial guide was drafted by the research team, based on the literature and a morning of non-participant student observation in the psychiatrist's consultations. Four consultations were also observed by two students (SG and TC) using an observation grid. The students, their supervisor (SK), and the psychiatrist (TB) then discussed these consultations. The initial guide was modified as interviews were conducted and new hypotheses emerged. The final version is available as Supplementary file S2.

2.3. Data analyses

2.3.1. Quantitative substudy

First, the quantitative variables were described using the mean and its standard deviation (SD). Categorical variables were described using numbers and proportions. Second, comparisons of proportions in bivariate analyses were made using the Chi-square or Fisher's exact test when the theoretical numbers were < 5. Third, multivariate logistic regression analyses were performed to measure the association between patient characteristics and reasons for therapeutic or diagnostic referral (Supplementary file S1). Adjusted odds ratios (AOR) with 95% confidence intervals (95% CIs) were reported. Statistical significance was defined for two-tailed tests, with a threshold of P-value < 0.05. All analyses were performed by LS and SK, using R software (version 4.2.2) and SAS software (version 9.4), respectively.

2.3.2. Qualitative substudy

Means and their ranges were used to describe quantitative variables (age, interview duration). A pseudonym assigned to each participant during the transcription was used when attributing quotes. Data analysis inspired by grounded theory [8,10] is detailed in Supplementary file S1.

2.4. Ethics

This research was conducted in accordance with the Declaration of Helsinki. Data collection, storage, and analysis were carried out in accordance with the General Data Protection Regulation (EU GDPR). All subjects in the quantitative phase received oral and written information from the referring GP and gave oral consent prior to participation. All subjects in the qualitative phase received oral and written information from the research team and gave oral consent at the start of the audio recording. The first author (SK) has signed a commitment to comply with the MR004 reference methodology with the *Commission Informatique et Libertés* (number: 2228934 v 0). The research received ethical approval

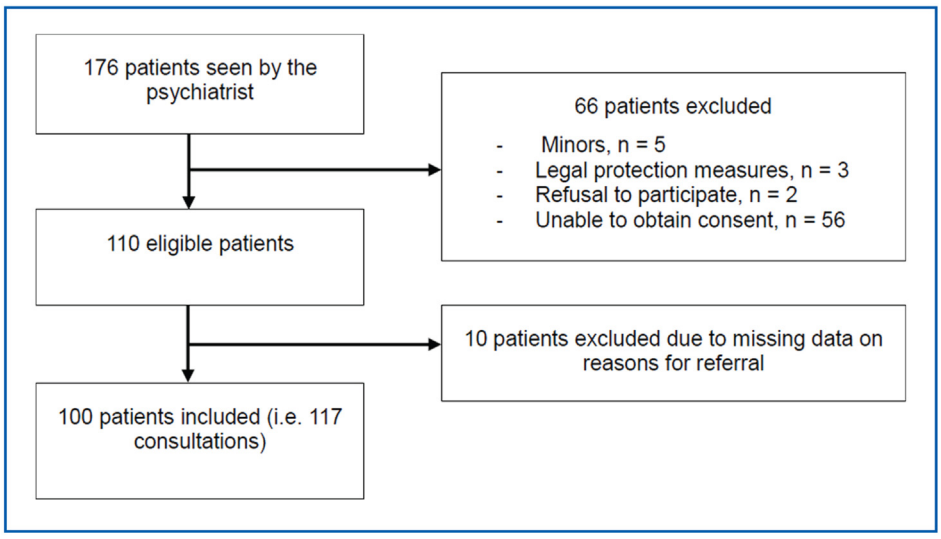

Fig. 1. Flowchart of the quantitative study.

from the Ethics Committee of the University Hospital of Bordeaux, France (number: AP 2022 – 54).

3. Results

3.1. Quantitative substudy: Need for GPs to refer to a specialist for better treatment for depressive or anxiety disorder and diagnosis of bipolar disorder

Of the 176 patients seen by the psychiatrist, 100 were included in the analyses (retention rate: 56.8%), representing a total of 117 consultations (Fig. 1). A comparison of included responders with those who were excluded from the analyses is presented in Supplementary file S3. The mean age was 47.2 years (SD: 16.5). As shown in Table 1, almost two-thirds of the patients were women, and 45% took psychotropic medication. Mental disorders suspected by GPs were, in decreasing order of frequency, depressive or anxiety disorder, work-related adjustment disorder, substance use disorder, bipolar disorder, psychotic disorder, and post-traumatic stress disorder.

Most consultations (83.7%) were based on at least one therapeutic reason. The referral for a therapeutic reason was not accompanied by additional explanations from the GP in 29.5% of cases (Supplementary file S4). When the therapeutic reason related to psychotropic medication ($n = 51$), in 56.9% of cases it was for a reassessment of medication already started. A diagnostic reason was present in at least 35.9% of all consultations, and an administrative reason was rarely present (4.2%) (Supplementary file S4). Administrative questions related to work absence concerned continuation, suspension, or a certificate issued by the psychiatrist to employers, occupational health practitioners, or insurance companies. Regarding the bivariate analyses (Supplementary file S5): compared with consultations without a therapeutic reason, consultations with at least one therapeutic reason were statistically more associated with the GP suspecting depressive or anxiety disorder than other mental disorder diagnoses. They were less often associated with having seen the psychiatrist more than once. Compared with consultations without a diagnostic reason, consultations with at least one diagnostic reason were statistically more likely to be associated with younger age. After adjustment for gender and psychotropic medication (Table 2), the odds of referral for one or more therapeutic reasons were higher if the patient had depressive or anxiety disorder. Referral for a therapeutic reason was less likely if the patient had bipolar disorder or had seen the psychiatrist more than once. After adjustment for gender, psychotropic medication, and reported alcohol use, being referred for one or more diagnostic reasons was more likely if the patient's illness was bipolar disorder but less likely if it was depressive or anxiety disorder (Table 2).

The psychiatrist's responses were mainly therapeutic ($n = 107$, 91.5%). As shown in Supplementary file S6, three out of four

Table 1
Description of patients in the quantitative study.

Characteristics, $n = 100$	n	%
Age groups, in years		
18–29	19	19.0
30–44	25	25.0
45–59	34	34.0
60–74	17	17.0
75 years or older	5	5.0
Gender		
Women	65	65.0
Men	35	35.0
Socio-professional categories (MD = 3)		
Farmers	1	1.0
Craftsmen, merchants, heads of corporations	5	5.2
Managerial staffs and intellectual professions	5	5.2
Intermediate occupations	19	19.6
Employees	31	31.0
Workers	8	8.2
Retirees	17	17.5
Unemployed people	11	11.3
Psychotropic medication according to ATC, N05 to N07	45	45.0
Reported tobacco use	26	26.0
Reported alcohol use	18	18.0
Reported cannabis use	7	7.0
Other reported use of illicit products	7	7.0
GP's suspicion of mental disorder		
Depressive or anxiety disorder	70	70.0
Work-related adjustment disorder	11	11.0
Substance use disorder	8	8.0
Bipolar disorder	7	7.0
Psychotic disorder	3	3.0
Post-traumatic stress disorder	1	1.0

MD: missing data; ATC: international classification of drugs of the World Health Organization, Anatomical Therapeutic Chemical. N05 to N07: drugs of the nervous system in ATC classification, including psycholeptics (N05), psychoanaleptics (N06) and others (N07).

Table 2
Multivariate analyses estimating the association between reasons for therapeutic and diagnostic referral and patient characteristics across all consultations, $n = 117$.

Patient characteristics	At least one therapeutic reason[c]				At least one diagnostic reason[c]			
	AOR1[d]	95% CI[g]	AOR2[e]	95% CI[g]	AOR1[d]	95% CI[g]	AOR3[f]	95% CI[g]
Having seen the psychiatrist more than once	0.34[a]	0.12–0.93	0.29[a]	0.10–0.84	0.75	0.32–1.79	0.76	0.31–1.88
GP's suspicion of mental disorder								
Depressive or anxiety disorder	4.73[b]	1.68–13.34	4.46[b]	1.57–12.69	0.49	0.22–1.08	0.38[a]	0.15–0.91
Bipolar disorder	0.18[a]	0.04–0.79	0.14[a]	0.03–0.63	7.69[a]	1.50–39.32	10.59[b]	1.88–59.72
Work-related adjustment disorder	0.36	0.11–1.21	0.40	0.12–1.35	0.77	0.25–2.39	0.68	0.20–2.29
Psychotic disorder	0.41	0.03–4.94	0.33	0.03–4.06	3.51	0.30–40.48	3.09	0.26–36.98
Substance use disorder	0.56	0.10–3.01	0.71	0.13–3.99	1.07	0.24–4.73	2.97	0.40–21.71
Age groups, in years								
18–29	–	–	–	–	–	–	–	–
30–44	0.92	0.19–4.34	0.79	0.16–3.87	0.56[a]	0.18–1.81	0.54	0.16–1.83
45–59	1.43	0.30–6.78	0.99	0.20–4.96	0.19[a]	0.06–0.6	0.20	0.05–0.74
60 years or older	0.66	0.14–3.06	0.39	0.07–2.05	0.36[a]	0.11–1.21	0.49	0.13–1.85
Socio-professional categories								
Retirees and unemployed people	–	–	–	–	–	–	–	–
Farmers, craftsmen, merchants, heads of corporations	0.42	0.07–2.53	0.51	0.08–3.10	0.47	0.09–2.43	0.49	0.08–2.93
Managerial staffs and intellectual professions	0.41	0.06–2.96	0.55	0.07–4.13	0.52	0.08–3.36	0.29	0.04–2.03
Intermediate occupations	1.40	0.30–6.57	1.57	0.33–7.54	0.57	0.19–1.73	0.47	0.15–1.52
Employees and workers	1.32	0.36–4.87	1.47	0.39–5.51	0.49	0.18–1.28	0.49	0.18–1.38
Reported tobacco use	1.72	0.46–6.42	1.79	0.47–6.78	0.69	0.27–1.76	1.15	0.40–3.30
Reported cannabis use	0.49	0.09–2.79	0.67	0.11–3.99	1.31	0.27–6.21	1.92	0.31–11.98
Other reported use of illicit products	0.49	0.09–2.79	0.67	0.11–3.99	1.31	0.27–6.21	1.92	0.31–11.98
Reported alcohol use	1.38	0.35–5.51	1.34	0.34–5.37	0.20[a]	0.05–0.77	/	/

[a] $P < 0.05$.
[b] $P < 0.01$. For age groups, the P-value of the overall effect of the variable is shown in the table.
[c] Reference category: no therapeutic (or diagnostic) reason requested by GP.
[d] AOR1: odd ratio adjusted for gender (forced variable).
[e] AOR2: odd ratio adjusted for gender (forced variable) and use of psychotropic medication (the only variable for which the association with the referral reasons studied is significant at $P < 0.20$ in bivariate analysis).
[f] AOR3: odd ratio adjusted for gender (forced variable), use of psychotropic medication and reported alcohol use (the two variables for which the association with the referral reasons studied is significant at $P < 0.20$ in bivariate analysis).
[g] 95% CI: 95% confidence interval; the episodes of post-traumatic stress could not be studied in these multivariate analyses due to lack of power (non-convergence of models).

consultations resulted in a pharmacological response (74.3%) and half resulted in a psychotherapeutic response (50.4%). In 58.6% of pharmacological responses, a modification (change in dosage or change, addition, or discontinuation of medication) was suggested. A diagnostic answer was given for 41.9% of consultations. Of these diagnostic responses, 48.9% were diagnostic confirmations whereas 22.4% were alternative diagnoses (Supplementary file S6). When the GP suspected depressive or anxiety disorder, the psychiatrist confirmed this diagnosis in 60% of cases, mentioned another diagnosis in 20% of cases, and declared absence of a mental disorder in 20% of cases in bivariate analyses ($P = 0.0385$). There was no statistically significant association between any other mental disorder suspected by GPs and the type of diagnostic response given by the psychiatrist.

3.2. Qualitative substudy: patients need a GP-psychiatrist pair that puts them at the center of care, despite a failing mental health system

Ten patients were included. Half of the samples were women. The mean age was 46 years (range 20–65). Patient characteristics are summarized in Table 3. The mean duration of the interviews was 47.5 minutes (range 28–70).

Table 3
Description of patients in the qualitative study.

Number identification	Age groups, in years	Gender	Socio-professional categories	Diagnosis of mental disorder prior to consultation with experiment's psychiatrist	Mental disorder diagnosed by a psychiatrist	Having been seen by a psychiatrist other than the experiment's psychiatrist	Having been seen by the experiment's psychiatrist	Being the main carer of someone with a mental disorder	Treating your mental health with alternative medicines[b]
Patient 1	50–69	Women	Intermediate occupations	No	No	No	No	Yes	No
Patient 2	31–49	Women	Disability[a]	Yes (bipolar disorder)	Yes	Yes, several times	No	Yes	No
Patient 3	50–69	Men	Workers	No	No	No	No	Yes	No
Patient 4	31–49	Women	Employees	Yes (psychotic disorder)	Yes	Yes, several times	No	Yes	No
Patient 5	50–69	Men	Intermediate occupations	Yes (depressive disorder)	Yes	No	Yes, several times	No	No
Patient 6	31–49	Men	Workers	Yes (bipolar disorder)	Yes	Yes, several times	Yes	No	No
Patient 7	18–30	Men	Craftsmen	Yes (bipolar disorder)	Yes	Yes, several times	Yes	No	No
Patient 8	18–30	Women	Employees	Yes (bipolar disorder)	Yes	Yes, several times	Yes	Yes	No
Patient 9	50–69	Men	Managers and intellectual professions	Yes (bipolar disorder)	Yes	Yes, several times	Yes	Yes	Yes
Patient 10	50–69	Women	Workers	Yes (anxiety disorder)	No	No	Yes	Yes	Yes

[a] Disability: working capacity reduced by at least 66% as a result of health condition (status awarded by French health insurance after medical assessment).
[b] Medicine alternatives: other than psychotropic drugs, physical activities or psychotherapies.

Four main conceptual categories emerged: patients' experience with impaired mental health; failing mental health care system; GP-psychiatrist pair as central to patient care, albeit asymmetrical in their contributions; and possible improvements to the mental health care system.

3.2.1. The experience of patients with impaired mental health

The change in the mental health of a participant or a close relative was experienced as a balance rupture that went beyond psychological functioning. This rupture, whether sudden or gradual in its onset, affected physical health and social and professional life. Patients described a loss of autonomy during this period (Fig. 2), being no longer able to interact appropriately with others, carry out their work, perform activities of daily living, or manage their emotions and behavior. This sometimes led to work absence or even forced hospitalization in a psychiatric unit. Loss of autonomy also created a double sense of insecurity (financial, emotional) and vulnerability (due to loss of self-confidence and trust in others).

The aim of mental health care was holistic rehabilitation. Awareness of the deterioration in mental health was a first step in the patient's care pathway, making it possible to look for causes and solutions. These solutions were manifold: drug treatment, GP follow-up with or without support from a mental health provider, an attentive and reassuring family environment, and not moving away from their usual place of residence. At a systemic level, it included caring for the whole person rather than focusing on the mental illness, providing quality time for care (shorter waiting times, sufficient medical listening time) and clear explanations to help the patient understand the illness and treatment options.

3.2.2. Failing mental health care system

Participants felt that the image of mental health professionals had developed positively, but the provision and organization of mental health care remained difficult to understand. Due to the lack of sufficient numbers of mental health professionals and their uneven distribution, time allotted for care was perceived as insufficient (short consultations, excessively long intervals between consultations) and this was experienced as additional suffering of systemic origin. Some participants were tired of seeing too many caregivers, and of wasting time repeating information (Fig. 2).

"I feel even sicker, really not well. You're in front of somebody to discuss it all over again and you're still explaining things. It's tiring and it makes me feel a bit guilty, I think." P06.

Patients believed that access to care was regulated by restricting patients' choice of caregivers and places of care due to saturation of the health care system. They believed that their access to mental health care was also determined by social class, level of education, socio-economic level, gender, age, and access to transport.

"*Depression is a rich people's sickness (laughs). Workers don't get depressed.*" P03.

"*I went to a sleep specialist, but I couldn't do the tests well because I couldn't write [. . .] I don't have a car. I go when someone takes me.*" P04.

"*I only had two or three sessions (with the MHC psychologist). I really liked it, but it's just that. . . well, I didn't have a lot of money,*

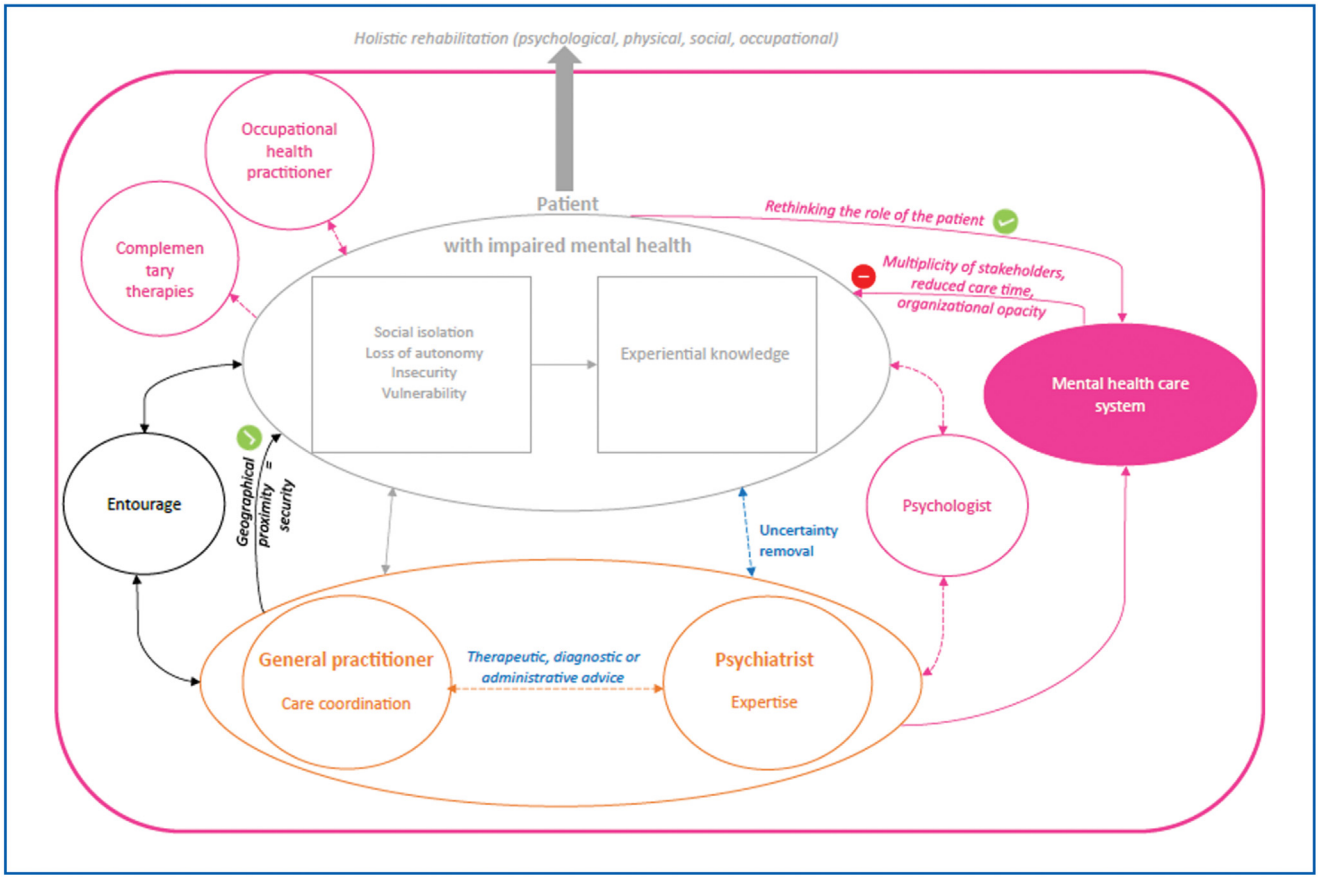

Fig. 2. Theorization of the experience of interprofessional collaboration between GPs and a psychiatrist in a French rural multi-professional health center. Mental health care facilitators and barriers .

so forking out between €40 and €50 every week or… once a month (sigh)… there it is." P08.

3.2.3. GP-psychiatrist pair as central to patient care, albeit asymmetrical in their contribution

Many patients appeared satisfied with their relationship with the GP for meeting their mental health needs. The psychiatrist was described as a caregiver whose practice was less well known, and possibly frightening. However, his skills were seen as complementary to those of the GP. Faced with a variety of health problems in his practice, the GP might not have enough time to deal with mental disorders or might get into difficulties when faced with complex cases. But the patient had known the GP long enough to trust them and let them coordinate access to specialist care; the psychiatrist stepped in to provide listening time and expertise that the GP lacked.

"*If he (the GP) advises me to see a psychiatrist, it's because I need one.*" P01.

"*He (the psychiatrist) has perhaps listened to me a little more, a little more deeply than the GP.*" P05.

According to participants, working in a pair was in line with the usual principle of teamwork in MHCs. These institutions were seen as suitable for concentrating the work of several professionals on a single site, limiting the number of procedures for patients, and ensuring interprofessional exchange. The psychiatrist's presence within the MHC was reassuring in terms of proximity to mental health care and in an attempt to provide a comprehensive range of care. This presence made it possible to deal locally with emergencies such as suicide risk.

3.2.4. Possible improvements to the mental health care system

Four changes identified as priorities by the participants were greater proximity and flexibility of mental health care, more interaction between mental health professionals and GPs, patient involvement in IPC, and integration of other actors or approaches in care.

Geographical proximity of care increased patients' sense of security and made it possible for them to change mental health providers and to refuse treatment. To improve interaction between caregivers, patients suggested the use of telephone calls, referral letters, digital tools, and meetings between GPs and psychiatrists. Some patients did not see why they should be more involved in the exchange between caregivers, while others demanded a more important place in it. Their experiential knowledge of mental disorders and their treatment could be better taken into account by caregivers. Other actors were perceived as usefully involved in the patient care pathway. Family and friends were described as the first actors mobilized by patients in psychological distress, long before the intervention of health professionals. Patients were aware of the precious but fragile help provided by these circles, which could themselves be in difficulty. They identified psychologists as mental health providers of well-being, using language as a tool for care. They did not understand why consultation with a psychologist was not fully covered by national health insurance. Occupational health practitioners were sometimes present in the care pathway. They were either chosen or imposed on the patient. Their role as guarantors of worker protection and rights was mentioned in some testimonies. However, sometimes the work absence or its extension – imposed by decision-makers – may have been a bad experience.

"*He (the occupational physician) found that it was a premature decision (to return to work), and I would have to wait 6 months before seeing him again in May…*" P06.

Finally, two participants mentioned that complementary therapies, such as hypnosis, acupuncture, homeopathy, haptonomy, and osteopathy, might be necessary without replacing medical or paramedical care. They reported difficulties in accessing these approaches due to lack of recognition by the French health system.

3.3. Integrative phase

GPs and their patients saw the psychiatrist as an essential mental health expert whose advice, if given at the right time, could be required only occasionally.

The final model for theorizing collaboration between GPs and psychiatrists evaluated in this study is shown in Fig. 2. Both substudies showed that GPs had a recognized place in the management of impaired mental health. They suspected a wide range of mental disorders and often provided medication or psychotherapy before seeking specialist advice. Patients identified their GP as their first mental health care provider. GPs coordinated access to mental health care and the IPC intervened mainly in the context of therapeutic or diagnostic uncertainty. The need for reciprocity in this IPC was highlighted in both substudies. Patients complained about a lack of interaction between psychiatrists and GPs. In the quantitative substudy, the psychiatrist's responses allowed the GP to either confirm or change diagnosis or treatment. Finally, both substudies also warned about the impact of impaired mental health on work.

GPs and patients had very few differences in opinion about IPC. The quantitative phase did not reveal any requests for emergency care from GPs. Although some patients hoped that such requests would be possible, the collaboration experienced had not been set up for this purpose. The psychiatrist's monthly presence might also explain the lack of urgent requests for specialized advice. Finally, GPs in the quantitative substudy did not address the systemic problems highlighted by the patients, as this quantitative phase focused on analyzing patients' health data. Solutions identified by patients in their interviews to move towards rehabilitation were multi-level: individual (awareness of one's mental health deterioration treatment), environmental (benefit from an attentive and reassuring entourage), and systemic (benefit from sufficient time for care, understanding the care system and its organization, limiting the number of caregivers in the care pathway, making it more flexible, and proximity of care).

4. Discussion

The quantitative substudy found that some therapeutic, diagnostic, and administrative requests were made by GPs. Therapeutic requests were more common for patients with depressive or anxiety disorder; diagnostic requests were more common for patients with bipolar disorder. In the qualitative substudy, patients perceived the GP-psychiatrist pair as central to mental health care. The GP was the care coordinator, and the psychiatrist was the expert. This pair, supported by other actors or approaches, guided the patient with a mental disorder towards holistic rehabilitation. When psychiatric consultations were provided within their usual primary care structure, patients also felt a reassuring proximity to care. Finally, there was little disagreement between GPs and patients about the IPC. For patients, it could improve the management of emergencies

(suicide risk). However, they agreed that the first provider of care was the GP, even in mental health care.

Few patient characteristics were associated with reasons for referral, except for GP suspicion of mental disorder. The literature shows that GPs ask for a collaboration with mental health professionals in the following cases: younger age of onset, bipolar disorder, psychotic disorder, substance use disorder, history of hospitalization, chronic mental disorder, and psychiatric or somatic comorbidity [1,7,12,15,19,22,29,30,33,35,39]. Our results were similar to those in the literature for younger patients, for bipolar disorder but not for psychotic disorder. GPs would find it difficult to manage bipolar disorder on their own. In particular, GPs in our study needed less psychiatric expertise to diagnose depressive or anxiety disorders, but more to treat them. Conversely, they needed more psychiatric advice to diagnose bipolar disorder and less to treat it. These findings seem counterintuitive. We hypothesize that GPs feel more comfortable diagnosing depressive or anxiety disorders, which are very common in primary care. The study's psychiatrist was mainly involved in improving therapeutic management, which was still coordinated by the GPs themselves. They were less comfortable diagnosing a new bipolar disorder and referred these patients to the private psychiatrist. However, their patients with a previous diagnosis of bipolar disorder did not need a one-off consultation with the private psychiatrist, as they were probably already being followed by another psychiatrist who was responsible for their treatment. The lack of a link between GP requests and psychotic disorder may be due to a lack of statistical power. Furthermore, in our quantitative study we did not record the history of hospitalization, the presence of comorbidities or the duration of mental disorders, and these factors could not be investigated.

Timely psychiatric advice allowed the GP to continue to manage the patient alone, but with the best available options. Another French study showed that 2 years after the occasional intervention of a mental health professional during a consultation-liaison, most patients were followed up by the GP alone, without a new referral. New advice was sought in only 44% of cases [40]. The psychiatrist's advice in our study prevented overprescribing or inappropriate medication for several primary care patients. Our study also showed that IPC does not have to be permanent but must be timely. Therapeutic advice could probably be obtained with simpler logistic and organizational tools rather than through a consultation-liaison: tele-expertise, dedicated telephone lines for GPs, multi-professional remote consultation meetings, etc. However, consultation-liaison seemed to be the essential IPC tool in three situations identified in our quantitative substudy: diagnostic assessment, unspecified therapeutic request, and request related to work absence. More than a quarter of referrals for therapeutic reasons were not accompanied by an explanation from the GP. The early stage of illness at which primary care actors intervene means that uncertainty is common in general practice [3,4,25]. GP expectations may be clarified and answers given when the psychiatrist sees the patient. Work absence due to mental health problems has not been studied much in primary care; a national public health analysis showed that the prevalence of work-related distress doubled in France between 2007 and 2019 [13]. One strategy to consider could be to prioritize consultation-liaison for primary care situations which can be difficult for GPs, as identified in our study.

Patients interviewed in our qualitative substudy preferred fewer actors in their care pathway and identified their GP as care coordinator. In other countries, care coordination in mental health collaboratives may be performed by someone other than the GP who is not necessarily a caregiver, but a care manager [28]. Some studies have shown that working with a care manager reduces symptoms of depressive disorder and improves patient health education, while facilitating interprofessional communication [2,16,24,26,32,36]. This assignment of the role of main care coordinator to the GP has two possible explanations. First, the present French health system emphasizes access to care mainly through GPs [18]. Secondly, mental health care managers are very rare in France. For example, the profession of advanced practice nurse (APN) is very new in France and little known to patients. These nurses have improved their skills in clinical examination, prescribing medication, patient follow-up, evaluating professional practice, and participating in clinical research. In February 2024 (i.e., 6 years after the publication of the first decrees), there were only 2329 APN graduates in France, according to the National Union of Advanced Practice Nurses [31]. There is no information on the number of APNs working in the specific field of mental health or on their involvement outside hospitals to improve collaboration between primary care and mental health stakeholders.

This study has several limitations. There is likely to be a selection bias in the quantitative study due to the voluntary participation of patients. Because of the small sample, it was not possible to investigate the relationship between patient characteristics and reasons for administrative referral in multivariate analyses. Lack of power may also explain the lack of significant associations between some patient characteristics and the therapeutic or diagnostic referrals. Finally, the two substudies focused on an experimental approach conducted within a rural primary care structure. It is difficult to extrapolate the results to another health care structure (especially hospital or urban) or to the rest of France. Nevertheless, the patient retention rate of almost 57% in the quantitative study was a strength of the study. Data from patients' medical records, rather than their reports, were also less subject to information bias. Finally, to our knowledge, few studies have focused on evaluating collaboration between GPs and psychiatrists in France by combining the expectations of patients and their caregivers.

5. Conclusions

The aim of this convergent parallel study was to assess mental health needs in a rural French primary care structure from the perspective of its GPs and patients. The study showed that GPs are involved in the care pathway of their patients with impaired mental health and that this involvement is recognized by their patients. IPC remains necessary to provide timely psychiatric expertise in identifiable primary care situations. Patients also emphasized that providing psychiatric expertise within their primary care structure makes it safer, closer, and more comprehensive.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors used DeepL Write® in order to copyedit the manuscript. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Disclosure of interest

The authors declare that they have no competing interest.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at https://doi.org/10.1016/j.amp.2024.09.007.

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