



**EFFECT OF PHYSICIAN-PATIENT ALLIANCE AND COMMUNICATION ON
ADHERENCE TO TREATMENT IN MENTAL HEALTH CARE: A SYSTEMATIC
REVIEW**

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ABSTRACT

The clinician-patient alliance, negotiated through clinical interaction, presents a critical intervention point. The following examines the impact of clinician-patient alliance and communication on adherence in mental health, identifying the specific mechanisms that mobilise patient engagement. Methods: In December 2010, a systematic search was conducted in Pubmed, PsychInfo, Web of Science, Cochrane Library, Embase and Cinahl and yielded 6672 titles. 17 studies reported positive associations with adherence, only four of which employed intervention designs. 10 studies examined the association between clinician-patient alliance and adherence. Subjective ratings of clinical communication styles and messages were assessed in 12 studies. 1 study examined the association between objectively rated communication and adherence. Conclusions: Clinician-patient alliance and communication are associated with more favourable patient adherence. Further research of observer rated communication would better facilitate the application of findings in clinical practice.

KEYWORDS: Communication, Alliance, Adherence, Mental health.

1. BACKGROUND

Consequently, the composition and objectives of psychiatric encounters have changed and in turn the roles of clinicians. This shift in role definition raises questions about the purpose and nature of the clinician-patient relationship and its influence on salient outcomes of the process of care including adherence to prescribed treatment e. what must a clinician say and do to optimise patient engagement? with medical or health advice^[3] and constitutes a crucial intermediate outcome for most mental disorders. In terms of a potential point of intervention, it is important to fully understand the role of the clinician-patient relationship, or 'alliance' as it will be referred to hereafter. Trained clinicians deliver specific therapeutic interventions that tropicalize medication cessation and relapse, normalizing rationales for stigma and recognition of characteristic prodromal symptoms.^[6] However, standard psychiatric encounters involve non-specific counselling to stimulate positive attitudes towards treatment, found to be equally as effective in the longer term.^[8] Central to achieving a beneficial alliance in this context is clinician-patient communication. Despite this, such reviews of communication typically exclude studies of psychiatric patients.^[9,10]

Collaborative communication and inclusion of the patient's perspective in relation to treatment decisions specifically i. Shared decision making (SDM) has emerged as a pivotal component in policy for mental health.^[11] Deemed ethically laudable and found to yield improvements on outcomes in physical health,^[12] both parties are encouraged to take steps to reach consensus about treatment, engaging in patient-centric communication that accounts for individual preferences. This is based on the expectation that it will increase self-determination and in turn patient treatment adherence.^[13] Little research has however systematically examined the impact of SDM on outcomes in mental health to affirm this.^[13,14] Moreover, application of such concepts is hampered by a lack of clear definition and measurement, rendering the specific behaviours and communication practices underlying patient centred care and engagement unclear. No review to date has collectively examined alliance and communication in mental health in order to determine the aspects of each phenomenon that mobilise adherence behaviours. This article presents an integration of evidence about the empirical grounding for relationship variables, behaviors and messages instrumental to promoting engagement with mental health treatment. The primary objective was to identify whether an association exists between clinician-patient alliance or

communication and treatment adherence in mental health care. Secondary objectives were to locate specific aspects of the therapeutic encounter that may be harnessed to improve treatment and describe the characteristics of literature. Communication refers to components of the behavioral exchange between clinician and patient^[15] with the potential to described either subjectively and objectively e. information giving and collaboration.^[17] The term alliance is broadly used to represent the clinician-patient relationship.

2. METHODS

An additional hand search in key journals of relevant professional categories, gray literature and dissertations was also performed. Table 2 depicts the terms used in the search process, how they were combined and where truncation was used in order to capture all relevant variants of the terminology. In databases where limits were imposed on search terms, the key terms i. communication/alliance and adherence were used. The search process was augmented by personal correspondence with experts, advising on appropriate terms and relevant literature. Prior to the screening, strict inclusion criteria were specified to orient the search filtering process. For studies to be deemed relevant, they included patient (or professional-patient) samples where participants were aged^[18,65] and receiving treatment for psychotic disorders, anxiety disorders or mood disorders. Pertinent data was that which had been collected via a subjective rating of the clinician- patient alliance/interaction using a validated scale or where a clear description of how the variable had been measured was provided e. via a single item assessing the state of the relationship.^[32] Alternatively, an objective record and assessment of naturally occurring communication was necessary (e.with ratings by independent researchers of audio or video taped recording). Also required, was an assessment of patient adherence, via direct (e. pill count, blood test) or indirect (e. Patient or clinician self-report) measures. The resulting analysis was considered appropriate if it, at minimum, assessed the relationship (correlation) between alliance/communication and adherence, or tested for a significant difference between adherers and no adherers in relation to these variables. Following searching, the resulting titles from each database were screened in accordance with the research aims.

Potentially relevant abstracts were obtained for further examination, a random selection of which (20%) were screened independently by a secondary researcher to check reliability and minimize potential bias. Full texts of the selected abstracts were then retrieved for more rigorous inspection and application of the exclusion criteria. Following further filtering, 114 full texts were examined in their entirety of which 20 met the review's inclusion criteria. Whilst review articles were automatically excluded in the search, reference sections were inspected for potentially applicable citations. Three studies were also retrieved from this additional search process. Only studies fulfilling all inclusion criteria were reported in the final review (n = 23). Data extraction was conducted using an instrument designed for this review to elicit all relevant aspects of included articles. This allowed for both qualitative and quantitative accounting of the study, including author, title, year, country, treatment setting sample, aims, data source, measures used, analysis, results, specific alliance/ communication variables associated with adherence, and limitations of the study. Whilst numerous articles referred to general predictors of adherence, only outcomes relating to alliance or communication were extracted. Two reviewers independently recorded the data, consulting with a third reviewer in the event of disparate documentation of study features. Quality assessment (QA) of the included studies was problematic as there is no 'gold standard' design for studies of clinician-patient alliance or interaction. The studies were assessed on four dimensions; reporting, external validity, internal validity and power. Instead, an additional QA variable was added to assess the study design and it's potential to allow for causal hypotheses. 1) Reporting: Do studies provide a clear description of aims, outcomes, characteristics of patients, findings and actual probability values? 2) External validity: Are those patients asked to participate in the study representative of the entire population from which they were recruited? Patients would be represented if they consisted of the entire source population, an unselected sample of consecutive patients, or a random sample (Total/1).3) Internal validity: Are the statistical tests used to measure the outcomes appropriate? Are both adherence and alliance/communication measures validated and reliable?.

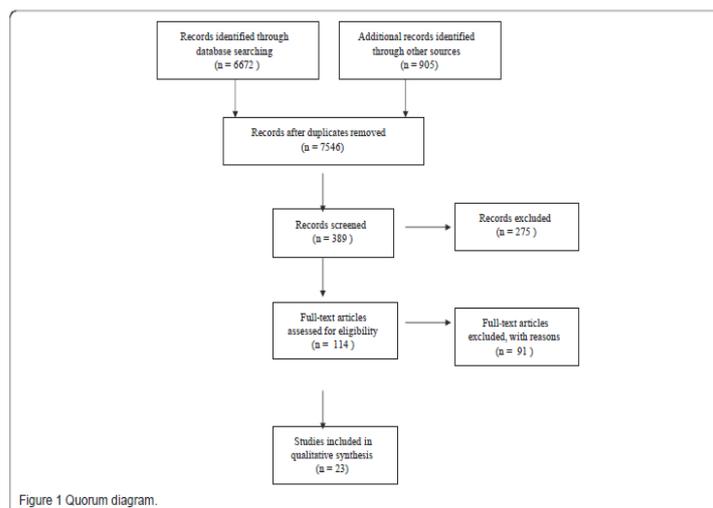
Table 1: Search resources.

Databases	Hand search	Grey literature
Pubmed	The British Journal of Psychiatry	System for Information on Grey Literature (SIGLE)
PsycInfo	The American Journal of Psychiatry	British National Bibliography for Report Literature
Web of Science	Schizophrenia Bulletin	British Library Direct
Cochrane Library	Archives of General Psychiatry	Proquest Digital Dissertations
Embase	Acta Psychiatrica Scandinavica	
CINAHL.	Journal of Psychiatric & Mental Health Nursing	
	Journal of Mental Health	
	Journal of Advanced Nursing	
	Issues in Mental Health Nursing	
	Journal of Psychosocial Nursing	

	Health and Social Care in the Community	
	British Journal of Occupational Therapy	
	Canadian Journal of Occupational Therapy	
	American Journal of Occupational Therapy	
	Journal of Occupational Science	
	British Journal of Social Work	
	Social Work in Mental Health	
	Journal of Social Work Practice.	

Table 2: Search terms with truncation.

Combined by “or” ! Group term 1 group 1	Combined by “or” ! Group term 2	Combined by “or” ! Group term 3	Combined by “or” ! Group term 4
Communicat*	Psychosis	Psychiatr*	Adher*
Talk	Psychotic	Doctor	Complian*
Interact*	Schizophr*	Mental health nurs*	Concordan*
Expressed emotion	Schizoaffective	Psychiatric nurs*	Nonadher*
Conversat*	Delusional	Social work*	Noncomplian*
Discourse	Depress*	Psycholog*	Concordan*
Dialogue	Dysthymi*	Care coordinator	Persistence
Relationship	Bipolar	Counsel*	Treatment usage
Alliance	Cyclothymi*	Therapist	Attendance
Shared decision making	Panic	Support work*	Engag*
	Agoraphobia	Psychosocial intervention work*	Rejection of therapy
	Phobia	Employment coach	Dna
	Obsessive compulsive disorder	Nurse practitioner	Drop out
	Post traumatic stress disorder	Case manager	Medication possession ratio
	Stress	Vocational rehab specialist	Service use
	Anxiety	Psych tech	
		Physician	
		Provider	
		Practitioner	



Group terms combined by ‘AND’ scored high ($\geq 70\%$) according to the defined high quality threshold.^[21] All studies were highly underreported and used appropriate statistical tests. However, some collective limitations can

be identified. Validated measures are not consistently implemented and have low external validity. Usually, random sampling or sequential enrollment is not used to recruit participants, or there is often insufficient detail

information to determine whether those who consent to participate are representative of the entire source population, or not. All studies also received low energy ratings due to lack of formal calculation of sample size. In addition, determining the direction of the effect was problematic in most of the studies reviewed. Most studies used a cross-sectional design, and only four empirically examined the impact of communication on adherence. The complexity of the determinants of adherence is well documented, but studies have not fully captured and discussed confounding factors in the analyses. For example, most studies have failed to capture and correct for adverse events, consistently identified as one of the most important reasons for failure of drug therapy in a single patient. Variety of mental health disorders.^[4,43]

Analysis and Findings

Criteria for conducting meta-analysis were not fulfilled due to variability in the statistical procedures and measures used to analyse relationship, communication and Seventeen studies reported positive associations with adherence. were considered positive if study authors reported a statistically significant ($p < 0.05$) association between adherence and at least one relationship/communication variable, or a statistically significant difference between adherent and non-adherent patients on such measures. Literature was conceptualized as three categories on the basis that alliance and communication may differentially influence adherence: Group 1: global measures of clinician-patient alliance ($n = 10$). Group 2: specific communication styles and/or messages communicated by the treating clinician (demonstrated via subjective measures or experimental interventions) ($n = 6$). Group 3: independently coded recordings of naturally occurring clinical communication ($n = 1$). Discussion of the studies and their pertinent results are reported within the proceeding narrative synthesis.

3. RESULTS

Clinician- patient alliance and treatment adherence Alliance is consistently associated with adherence in mental health. and 1 high), eight yielded significant associations to some aspect of the clinician-patient relationship. This instrument, used in patient/clinician self-report or observer rated versions, provides measures of three related components hypothesized to determine the degree and quality of clinician helping alliances: a) patient and therapist agreement on the goals of treatment, b) patient and therapist agreement on the tasks to achieve these goals and c) the development of a personal bond between patient and therapist. A particularly important aspect of the working alliance may be patient-clinician agreement on the tasks of treatment, found by two studies to be significantly associated with patient adherence in subscale analyses.^[24,26] In a psychotherapy (Cognitive Behaviour Therapy) setting, therapist, and patient agreement on the goals of treatment was also relevant to premature termination of therapy.^[26] Main-

stream psychiatric services differ from conventional psychotherapy in important respects including the commonly open-ended nature of treatment, actual or potential use of coercive treatment measures and higher variability of the frequency, length and goals of consultations.^[15] In attempt to address this issue the same study used a dual measure of adherence, the Active Engagement Scale, a 15-item questionnaire, assessing primarily involvement in therapy and collaborative participation. As prospectively observed over a two year period, the more actively engaged in therapy patients become the more likely they may be to take their medication as prescribed.^[28] This 10-item bipolar disorder-specific instrument elicits the degree of comfort a patient expresses with their treatment according to statements regarding their care environment as it has been developed by their mental health team. One study analysing the overall HCCQ rating found a significant association with the baseline measure of alliance but not 1 year follow up.^[30] The Overall HCCQ score was significantly associated with interpersonal barriers to adherence but not missed medication doses. Similarly, in individual item analyses, certain alliance variables were associated differentially to the two dimensions of adherence measured. Salient aspects of team alliance related to both measures were identified as conveying confidence in the patients ability to make changes, ensuring the patient and team stay in frequent contact and regularly reviewing the patient's progress in managing all aspects of their treatment plan. The extent to which patients perceive behavioural traits such as listening, empathy and respectfulness to manifest in the clinician's communication style relates to their following of medication directions.^[33] to involve them in treatment decisions, have been found to be more adherent at 6 months follow up^[36] and 6– 8 weeks post initial consultation.^[38] In another sample, the degree to which outpatients viewed their prescribing doctor as exhibiting a collaborative style in relation to similar items was not associated with subsequent adherence at 3, 6, 9 or Whilst an explanatory hypothesis for contradictory findings could be variation in patient preference for decision involvement, a further study found no association between perceived participation and adherence, even when the degree of patient involvement was aligned with their preference for SDM.^[37] The first applied a decision aid, a 16 page booklet addressing the pros and cons of alternative types of anti- psychotic medication, and a planning talk between patient and physician to establish agreement on further treatment^[44] In the second, physicians were trained in SDM and a decision board for use during encounters was distributed to the patients, in addition to evidence based information about depression care and specific encouragement for patients to be active in the decision making process.^[39] Though such tools are designed to enhance patient involvement, both studies found no effect on adherence compared to routine care. Intervention patients received an educational book, videotape about effective management of chronic or recurrent depression, in-person visits and telephone

monitoring and were significantly more likely to refill antidepressant medication prescriptions than usual care patients during the one year follow up period.^[41,45] If indeed collaborative communication stimulates adherence behaviours, its positive influence may be attributable to an intervening variable i. enhancing patient beliefs about the medication prescribed.^[17] One unique study tested a theoretical model suggesting that physician (initial and follow up) collaboration style influences client medication beliefs and in turn medication-taking behaviour. Fundamental elements of physician initial communication style, derived from the Health Communication Model^[46] included the degree of friendliness during the visit, asking if the patient had questions or concerns, assisting with issues relating to the use of medication, providing clear instructions on how to take medication, clearly explaining how the antidepressant would affect the patient and talking about actions the patient can take to feel better. Key components of the follow up communication style were the extent to which the physician encourages expression of concerns or problems with taking medication, asks about and listens to concerns about medication and helps solve problems related to the patient's use of medication. Consistent with this, two studies^[34,35] identified distinct medication-related messages that may have a bearing on adherence behaviour. That is, the time period patients are instructed to take their medication and discussion regarding side effects may be instrumental in decreasing the odds of discontinuing antidepressant therapy. Potential medication-related motivators of adherence in the initial phase of antidepressant treatment

have also been identified.^[35] These include physician question asking about prior use of antidepressants, instructions provided by the doctor i. to continue medication use even when symptoms have alleviated; check before discontinuing medication; take medication daily, and advising the patient what to do in case of questions. General discussion of pleasant activities may also be important to initial motivation to adhere to regimens. In this study, no communication variables were found to be significant predictors of later stage adherence, suggesting important topics are dependent on the stage of treatment. Another study assessing the same communication messages did not find them to be related to antidepressant adherence.^[36] Objectively measured communication and adherence Communication signifies an observable behavioural exchange between the patient and clinician and therefore has the potential to be captured in objective terms by an independent observer.^[15] 2) number of different types of information the doctor provided the patients about antidepressants 5) number of questions the patient asked about antidepressants. Analyses determining how the communication variables were related to adherence, demonstrated that only patient question asking was significant. That is, patients who asked more questions regarding their medication during the encounter were less adherent to their therapy during the 100-day period after their visit. However, the fact that medication-specific discussion was not found to be associated with adherence is in contrast to the previous research reviewed.

Table 3: Quality assessment ratings for included studies.

Paper	Reporting	External validity	Internal validity	Power	Study design	Study quality score %
Sajatovic et al. (2006) ^[22]	5/5	0/1	1/3	0/1	0/2	50%
Weiss et al. (2002) ^[23]	5/5	1/1	2/3	0/1	1/2	75%
Corriss et al. (1999) ^[24]	4/5	1/1	2/3	0/1	1/2	67%
Lecomte et al. (2008) ^[25]	5/5	0/1	2/3	0/1	0/2	58%
Startup et al. (2006) ^[26]	5/5	0/1	2/3	0/1	0/2	58%
Olfson et al. (2000) ^[27]	5/5	1/1	1/3	0/1	1/2	67%
Frank et al. (1990) ^[28]	5/5	0/1	2/3	0/1	1/2	67%
Zeber et al. (2008) ^[29]	5/5	0/1	2/3	0/1	0/2	58%
Perron et al. (2009) ^[30]	5/5	0/1	2/3	0/1	0/2	58%
Madsen et al. (2009) ^[31]	4/5	0/1	2/3	0/1	1/2	58%
Shigemura (2010) ^[32]	5/5	0/1	1/3	0/1	0/2	50%
Yeh et al. (2008) ^[33]	5/5	0/1	1/3	0/1	0/2	50%
Bull et al. (2011) ^[34]	5/5	0/1	1/3	0/1	0/2	50%
Lin et al. (1995) ^[35]	5/5	0/1	1/3	0/1	1/2	58%
Gonzalez et al. (2004) ^[36]	5/5	0/1	2/3	0/1	1/2	67%
Bultman et al. (2000) ^[17]	5/5	0/1	1/3	0/1	1/2	58%
Mahone et al. (2008) ^[37]	4/5	0/1	2/3	0/1	0/2	50%
Hamann et al. (2006) ^[14]	5/5	0/1	2/3	0/1	2/2	75%
Loh et al. (2007) ^[38]	5/5	0/1	2/3	0/1	2/2	75%
Loh et al. (2007) ^[39]	5/5	0/1	2/3	0/1	2/2	75%
Ludmen et al. (2003) ^[45]						
Von Korff et al. (2003) ^[41]	5/5	0/1	2/3	0/1	2/2	75%
Sleath et al. (2003) ^[42]	5/5	0/1	2/3	0/1	1/2	67%

Variability in adherence measures

The variability in assessment and definition of adherence, as evident in Table 4, presents an important consideration as comparability between studies is affected. Most frequently, adherence was assessed via patient report ($n = 14$), consistent with an identified preference for this method in mental health.^[48] Choice of measures and criteria for non adherence however were heterogeneous, ranging from patients being asked if they had stopped taking their medication for a period of one week or more during the intermittent follow up period.^[27] to patient's rating on a scale of 0–100 how often they forgot to take their medication, alter their dose, or miss a dose intentionally to suit their needs. The only measure to be duplicated between studies^[29,30] was the Morisky scale.^[49] Three studies used a combination of therapist and patient reports^[28,39,44] and two studies^[23,24] used solely therapist report, both of which employed a 4-point likert scale with ratings from 1 'active compliance' to 5 'passive compliance'^[50] i.e. objective, assessments were only used in four studies^[26,36,42,44] in the form of pharmacy refill records, premature termination of therapy and blood plasma levels. For example, exaggerating the degree of adherence (patient self-report) and basing adherence judgements on deteriorating clinical state or inaccurate perception of agreement about treatment^[51] (therapist-report). Most notably in relation to consensus development, allowing for studies to be compared on a common variable.

4. DISCUSSION

To our knowledge, this is the first review to examine alliance, communication, and adherence in mental health. The methodological quality overall was moderate, reflecting largely cross-sectional nature of the research in this field and limitations in comparability and identifying causality. Ten papers examined the relationship between adherence and the clinician-patient alliance, which emerged as a consistent predictor, though its components have differential significance. However, collaborative features of communication more generally, such as imparting medication-related information and discussing the practicalities of treatment specifics, were positively associated, though less studied. Only one study explored the association between adherence and observer rated clinical communication, highlighting a gap in psychiatric literature for more objective methods of communication measurement. Specific communication mechanisms that result in patient engagement This review shows that in relation to adherence, more task-oriented elements of the alliance may be instrumental. Agreement on the tasks of treatment, collaborative participation and regularity of contact with clinicians for example emerge as 'active' elements of the alliance. It is unclear how a positive clinician-patient alliance translates to specific communication styles and messages that can be utilised to improve engagement. SDM provides a model of communication to enhance patient involvement in the

decision process of consultations but is inconsistently associated with adherence in mental health. Whilst associated tools such as decision aids help patients make deliberative choices among treatment options and provide a platform from which they can assess risks and benefits, non-significant associations with adherence outnumber positive. Sharing preferences about treatment may be particularly challenging in mental health care due to the nature of symptoms that make establishing a shared understanding about treatment problematic. Research must identify the complications of sharing decisions in these contexts to further understand the relationship with adherence behaviours. Clinicians who are friendly, explain medication, address questions and concerns and discuss treatment specifics e. Medication instructions, are more likely to have patients who adhere to regimens. Though further pathway research is necessary to reinforce findings,^[54] the mechanism by which this occurs may be enhancement of patient beliefs about medication. The emphasis on medication-specific discussion certainly aligns with the notion that knowledge maybe an important patient factor clinicians can influence in order to improve adherence in mental health. Coupled with the finding that clinician optimism is associated with adherence, perhaps provider attitudes towards treatment, manifest in communication, can influence patient's expectations of prescribed treatment. Indeed, when studied outside of the context communication, clinician attitudes towards medications have been found to impact patient's medication adherence in mental health.^[55] Only one study was able to objectively identify a specific communication practice, patient question asking, as related to adherence. Further studies of this nature may enable identification of specific practices that either indicate patients risk of nonadherence, or are involved in mobilizing self-care behaviors in mental health. This review has demonstrated a clear paucity of objectively measured natural clinical communication in mental health. The findings of this review are consistent with mental health research identifying the alliance to be associated with other treatment outcomes.^[56] An emphasis on agreement about tasks of treatment is in line with perceived patient agreement being associated with adherence in general medicine.^[51] It has been suggested that discussing treatment specifics, highlighted in this review, enhances clinician's ability to perceive such patient agreement.^[51]

The potential for perceived collaboration in clinical encounters to encourage patient engagement aligns with findings in general medicine that collaboration is associated with improved adherence.^[57] Inconclusive findings in relation to collaborative treatment decisions specifically i.SDM is inconsistent with more positive outcomes in general medicine,^[12] but consistent with reviews in mental health examining SDM and a range of patient outcomes.^[13] Interestingly, unlike general medicine where numerous empirical studies from various populations and settings link systematically coded communication to adherence.^[9] only one study

objectively measured naturally occurring clinical interactions, suggesting a research deficit in psychiatry specifically. Clinician-patient alliance and communication in schizophrenia for example, addressed in 7 studies, is complicated by the nature of psychotic symptoms.^[58] Whilst practical constraints of cross-sectional studies in naturalistic settings are expected, general improvements to derive from these findings relate to; increasing implementation of validated measures and supplying adequate information on reliability and internal consistency; striving for larger sample sizes and performing formal sample size calculations to increase precision in extrapolating effects to the wider mental health care population; employing random sampling or recruiting consecutive patient admissions to optimize external validity and the potential inferences that can be made. It may be important to distinguish between components in analyses and explore their differential associations with adherence, e. clinician-patient agreement about the tasks of treatment may be more important than bond, to enhance the potential application of findings in It is therefore difficult to consider how specific communication practices are involved in the formation of a positive alliance. Investing more effort, and specificity, in studying clinical communication variables may provide a fruitful starting point from which we can look at how, and if, such practices are related to subjective perceptions of alliance and outcomes like adherence. More objective micro analytic methods such as conversation analysis that account for context, sense making, and clinician-patient interactivity may be useful approaches in achieving this. Thirdly, whilst it is appealing to conclude that alliance and communication have an impact on patient cooperation with treatment regimens, it is important to contextualize any effect within the interplay of other possible adherence determinants e. illness related, demographic and psychosocial factors. Fourthly, longitudinal prospective studies that follow patients and clinical interactions over time are necessary to account for the potentially dynamic nature of adherence behavior and that the clinician-patient alliance may change or develop. The question of whether the predictive power of the alliance or communication derives from the effect of patient engagement itself on the interaction, or even patient characteristics present at the start of treatment, remains pertinent in future research.

5. CONCLUSIONS

Adherence to mental health treatment is frequently a challenge for practicing clinicians. Treatment and patient factors have attracted most attention in published research. How this translates into tangible communication practices, and the mechanisms by which these may influence treatment engagement are less conclusive and require more sophisticated studies and methodological techniques. Communication represents an observable exchange between patient and clinician that may be objectively described. Currently, literature

implies providers should engage patients collaboratively in the consultation in order to establish agreement surrounding the tasks of treatment, an important aspect of alliance. Training clinicians to discuss treatment specifics, including patient concerns about treatment may improve their ability to perceive this agreement,^[51] improve patient's beliefs about and attitudes towards treatment; and gain insight into the idiosyncratic reasons outside of the clinical interaction also underlying nonadherence. As such, whilst time constraints on psychiatric encounters pose a challenge to clinicians in developing bonds with patients, more effective collaboration on practical aspects of treatment may be one way of compensating for this. Clinicians should also observe features of patient communication e.g. question asking that may be indicative of engagement both within, and external to, the consultation. SDM is outlined in policy as a preferred mode of communication that will improve patient adherence. Despite methodological deficiencies in this field, engagement in the psychiatric consultation itself may impact patient engagement with treatment more globally.

Competing interests

The authors declare they have no competing interests.

Authors' contributions

LT and RM were involved in the conception of the review. LT designed the study, conducted the search, selected the studies, interpreted the data and drafted the manuscript.

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