REVIEW ARTICLE

Factors Affecting Medication Adherence Among Patient With Schizophrenia: A Literature Review

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ABSTRACT

Introduction: This review aimed to investigate The Schizophrenia necessitates long-term care and frequently calls for intervention, which frequently results in drug nonadherence. **Methods:** There are 20 articles in it. The first published study was thoroughly researched using the following electronic databases: SCOPUS, SCIENCE DIRECT, SAGE, PsychINFO, and PubMed. The inclusion criteria were met by all studies published in English between 2019 and 2021 that used a quantitative study design and people between the ages of 18 and 65 as participants. **Results:** Atypical antipsychotics, minor psychiatric symptoms, prior medication history, a good attitude toward medicine, male gender, socioeconomic status, general health state, and self-efficacy. **Conclusion:** Reduced status, life itself, length of sickness, substance misuse, degree of education, and disease severity were found to have influences on drug adherence. Influence on therapeutic practice, especially the delivery of psychoeducation.

Keywords: Medication Adherence; Patients; Schizophrenia.

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INTRODUCTION

A psychotic mental illness called schizophrenia affects 20 million people globally. The inability to establish interpersonal interactions with others in a given time, place, and context, as well as cognitive, emotional, linguistic, and behavioral abnormalities, are characteristics of the disorder (1–4). According to the Riskesdas 2018 survey conducted in Indonesia, from 2013 to 2018, 7 out of every 1,000 patients had schizophrenia (5). In East Java, The indicator for those receiving treatment for mental diseases reached 37.47%, according to the Years of Disabled Persons Life (YLDS) survey, and mental problems reached 13.5% (6).

Antipsychotics and psychosocial therapies are typically needed for long-term treatment of schizophrenia (3,7). There are two primary categories of antipsychotics: normal and atypical (8). Schizophrenia is an illness that frequently goes between remissions and relapses (4). Many individuals who suffer from schizophrenia don't fully comprehend their disease and may not take their medicine as directed (4). Adhering to therapy when people with psychotic disorders are not hospitalized is a complex process that is extremely difficult to identify (9). According to several studies, this lack of compliance is one of the causes of relapse, hospital readmissions, and higher treatment expenses (10,11). Numerous factors may contribute to non-adherence to therapy, but the fundamental cause is still unknown. According to multiple research findings, 19.1% of participants did not follow treatment regimens (12).

Adherence to medicine is a problem that affects many people, not just those with schizophrenia. Medication compliance is also a difficulty for those with ailments like diabetes, heart disease, chronic pain, sex-transmitted illnesses, obstructive pulmonary disease, and other psychiatric conditions (13). The concept of adherence is "the extent to which a person's conduct in following a diet, taking their medications, and/or modifying their lifestyle is in agreement with recognized recommendations from healthcare experts" (1). Since prescription medicines (antipsychotics) must be taken as directed by a doctor. In this study, medication adherence was referred to as a behavior.

Adherence may have a quick effect. Psychotic medication nonadherence can make psychiatric symptoms worse and negatively impact social interaction and lead to suicide (14). In 2005, return costs for patients with schizophrenia who failed to comply with hospital admissions varied from US$1392 million to $1826 million (14) As a result, the impact has an impact on society as well as individuals.

It's critical to comprehend the variables influencing medication compliance in individuals with schizophrenia. The outcome, this literature study was carried out to compile empirical data pertaining to aspects of medication review.

METHODOLOGY

SCOPUS, SCIENCE DIRECT, SAGE, PsychINFO, and PubMed were used as the electronic databases for the initial thorough literature search for published studies. Then, additional articles were found by searching through the reference lists of the articles that had already been found. The following criteria were used to include studies: (a) were written in English within the previous five years (2019–2021); (b) used quantitative research designs; (c) included adult individuals with schizophrenia aged 18–65; and (d) looked at factors affecting medication adherence. Medication, adherence, non-adherence, adherencee, non-adherencee, antipsychotic, neuroleptic, schizophrenia, and psychosis were some of the search phrases used. Predictor, reason, factor, variable, determinant, element, component, aspect, belief, attitude, influence, and effect were additional search phrases. Studies that involved people with criminal history were not included in this review because they might not accurately reflect the population with schizophrenia overall.

Following the search procedure, The inclusion and exclusion criteria stated in table I are used to select articles..:

RESULTS

Adherence can be defined as a patient's behavior toward advice offered and accepted by both the patient and health professionals, one of which is adherence to prescription regimens. Treatment adherence factors are divided into two categories in this systematic review, namely:

1. Internal factors that affect medication adherence in schizophrenia patients include advanced age, the patient's personal belief that medication is not necessary for recovery, self-efficacy, general health status, men's gender, worse treatment attitude, poor decision-making ability, poor insight, and side effects.

2. External factors
Lower socioeconomic position, living alone, disease duration, drug usage, degree of education, illness intensity (e.g., being in the acute phase), and participation in services for mental health are examples of external factors that influence medication adherence. Medical establishments, marriage status, and monotherapy

3. Psychosocial factors
Medication adherence is affected by the psychosocial factors listed below: Living with family and receiving social help.

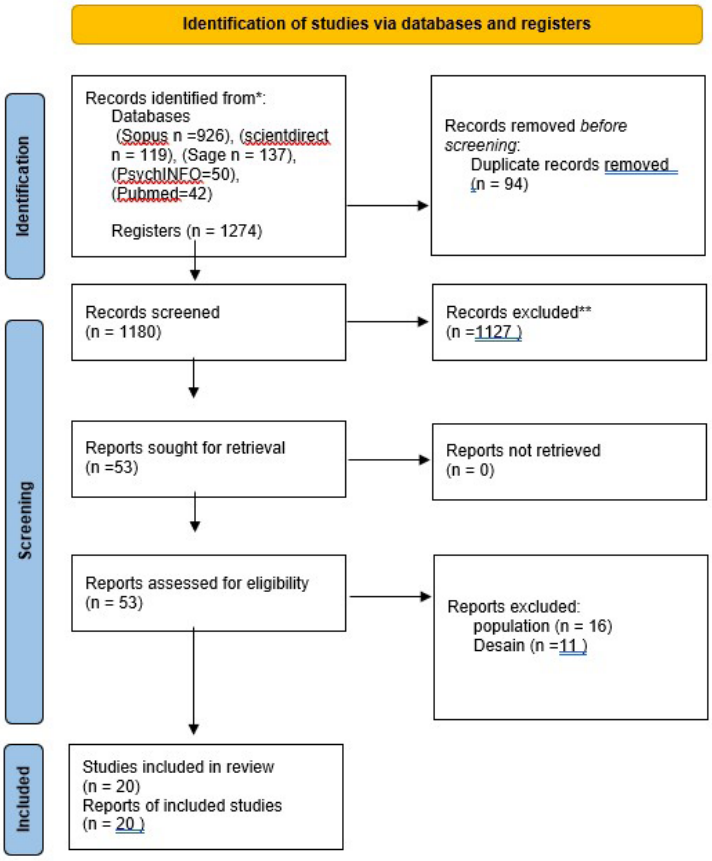

Figure 1 : Identification of studies via databases and registers.

DISCUSSION

The objective of this review was to examine empirical data that revealed variables related to adult patients with schizophrenia taking their medications as prescribed. The results identified two elements that are linked to prescription compliance. factors consist of Greater insight into the illness, past history of medication compliance, positive attitude toward medication, specific types of atypical antipsychotics, less severe psychotic symptoms, and social support, as well as self-efficacy, general health status, male

Table II : Summary of included studies

S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
1	Nonadherence after hospital discharge in patients with schizophrenia or schizoaffective disorder: A six-month naturalistic follow-up study [15]	Design: observational, prospective study Subjects: 110 people with schizophrenia or schizoaffective disorder. The data collection process was carried out during hospitalization and followed up for six months. Variables: Sociodemographic, clinical, psychopathological and treatment-related variables, non-adherence, Instrument: Medication Possession Ratio (MPR) was used to assess adherence to oral antipsychotics Analysis: multivariate logistic regression	58.2% of patients had non-adherence identified. According to the findings of multivariate logistic regression analysis, low socioeconomic status (OR = 3.68; 95% CI = 1.42-9.53), use or abuse of specific drugs (OR = 2.79; 95% CI = 1 07-7.28), non-adherence as causes for recurrence and repeated hospital admissions (OR = 5.46; 95% CI = 2.00-14.90), and symptom severity (OR = 2.00; 95% CI = 1.02-3.95) are all associated with The biggest reason why patients with schizophrenia don't stick with therapy is the notion that medication is not necessary. Low socioeconomic level, living alone, chronic disease, drug misuse, and different types of non-compliance, such as purposeful disobedience, are additional variables (and unintentional disobedience)
2	Factors Associated with Medication Adherence Among Patients with Severe Mental Disorders in China: A Propensity Score Matching Study, [16]	Design: retrospective cross-sectional study Subjects: 1292 respondents with mental disorders (psycosis) Variable:,Factors that affect compliance Instrument: questionnaire medication Analysis: multivariate logistic regression analysis	Based on findings from studies. Comparatively, it was discovered that medication adherence in 686 groups was substantially higher (92.6% vs. 61.2%). Poor adherence was linked to advancing age and periods of consolidation, while education level was a favorable predictor of adherence.
3	Medication adherence and its correlates among patients affected by schizophrenia with an episodic course: A large-scale multi-center cross- sectional study in China, [17]	Design: Cohort study Subject: 1198 people with schizophrenia Variables:Medication compliance, attitude in taking medication, negative side effects of drugs Instruments: Medication Adherence Rating Scale (MARS), Clinical Global Impression-Severity of Illness (CGI-SI) and Sheehan Disability Scale-Chinese version (SDS-C) Analysis: multivariate logistic regression analysis	According to the study's findings, 28.5% of patients met the standards for good adherence to antipsychotic therapy. Age, stable income, disease severity, and being in the acute stage of the condition all had a significant impact on drug adherence.
4	Analysis of Medication Adherence and Its Influencing Factors in Patients with Schizophrenia in the Chinese Institutional Environment, [18]	Design: a cross-sectional study Subject: 316 people with schizophrenia Variable:,Factors that influence medication adherence Instruments: The Medication Adherence Rating Scale (MARS), Positive and Negative Syndrome Scale (PANSS), General Self-Efficacy Scale (GSES), Schizophrenia Quality of Life Scale (SQLS), and Scale of Social Skills for Psychiatric Inpatients (SSPI) Analysis: Linear regression analysis, descriptive analysis and ANOVA	Self-efficacy, psychosocial variables, symptoms/side effects, and daily activities all significantly influenced medication adherence, according to the study's findings (F = 30.210, p 0.001).

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S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
5	The effects of the frequency of participation to the community mental health center on insight, treatment adherence and functionality, [19]	Design: Retrospective study Subject:.408 people with schizophrenia Variable: Insight,compliance and function Instruments: Medication Adherence Rating Scale (MARS), Global Assessment of Functioning (GAF), Analysis: The Mann/Whitney U Test, he Pearson Chi/Square, Fisher Exact and Fisher/Freeman-Holton, ANOVA	According to the study's findings, medication adherence was significantly different for patients who had used mental health services.
6	Medication adherence in first-episode psychosis patients in Singapore, [20]	Design: a cross-sectional study Subjects: .445 patients with psychosis Variable:,Medication adherence Instrument: PANSS, Global Assessment of Functioning Scale Analysis: multinomial logistic regression models	According to the findings of a study involving 445 patients, 51% of the patients were men with a mean age of 26.3 years and a diagnosis of schizophrenia spectrum and delusional disorder in 74.6% of them. Another 14% of the patients had affective psychosis, and 11.3% had brief psychotic disorder or psychotic disorder. unknown lunatic. 65.5% of people at a 1-year follow-up indicated regular compliance, 18.7% reported partial compliance, and 15.8% reported non-adherence. Male sex, living alone, and having weak decision-making and insight skills are all associated with disobedience. ethnic Malays, who have performed national service, are partly to blame for compliance.
7	Treatment Adherence in Youth with First-Episode Psychosis: Impact of Family Support and Telehealth Delivery, [21]	Design: retrospective study Subjects: .113 respondents with schizophrenia Variable:,Family support and health services (telehealth) Instrument: chart review Analysis: A Poisson regression model	According to the study's findings, social support and the direct (face-to-face) provision of mental health services by healthcare professionals were two elements that contributed to treatment adherence in 47% of those who took part in intervention activities.
8	Correlates of poor medication adherence in chronic psychotic disorders, [22]	Design: a cross-sectional study Subjects: Population of 100 people with chronic mental disorders (schizophrenia) who have poor adherence. Samples of people with chronic mental disorders are over 18 years old and are in a mental hospital or IRJ. Large Sampling Techniques Sample Instrument: PANSS, Global Assessment of Functioning Scale Analysis: multinomial logistic regression models	According to the study's findings, the average age was 35.7 years (up to 8.8), 61% of participants were men, and 80% had schizophrenia, with a range of 22.4 to 7.6 years for the mean age of onset. The average percentage of CPD medicines missed was 64%. In ten, one have a drinking problem. Most people encounter some obstacles to compliance. Most clinical factors lack significance. According to the Routine Tablet Questionnaire, although hospitalized patients with CPD are more likely to have lower adherence (P 0.01), as did those who had less favorable treatment opinions. Higher CPD symptoms (Drug Attitude Inventory, P 0.01) severity (P 0.001 on the Short Psychiatric Rating Scale) and greater likelihood of alcohol consumption (Identifying Alcohol Use Disorders) Test, P < 0.001)

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S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
9	An analysis of the relationship between social support levels and treatment compliance of individuals diagnosed with schizophrenia Ulzlem, [23]	Design: descriptive and correlational Subjects: Population: All schizophrenic patients who visited the IRJ from June 2017 to January 2018. Samples of patients with schizophrenia Total sampling technique was sampling with the criteria for being diagnosed with schizophrenia, schizophrenia in remission phase, not having physical and nervous system diseases, aged over 18 years. The exclusion criteria were being in an active period, having physical and nervous system diseases, not willing to be a respondent. Large sample of 110 patients with schizophrenia family Variable: social support with medication adherence Instruments: Personal information (age, gender, educational status, marital status, place of residence, income status, employment status, living (alone or with others), and leaving work due to interference, perceived social support (MSPSS) and Morisky compliance scale Analysis: Descriptive statistical data (number, mean, standard deviation, percentage distribution), Pearson's correlation analysis	According to this study's findings, there is a link between a person with schizophrenia's amount of social support and their adherence to their medicine.
10	The influence of adherence to antipsychoticsmedication on the quality of life among patients with schizophrenia in Indonesia, [24]	Design: descriptive cross-sectional design Subjects: Population of people with schizophrenia who visited the outpatient polyclinic between August and September 2014. The sample of people with schizophrenia with the criteria (1) a diagnosis of schizophrenia according to the Diagnostic and Statistical Guidelines for Mental Disorders (DSM IV)/(PPDGJ III), (2) aged between 18 and 65 years, (3) clinically stable (not acutely ill or have not been hospitalized for at least the last 3 months), (4) speak Indonesian, (5) Global Assessment of Function (GAF) Scale score > 70, (6) received a type of oral antipsychotic medication, and (7) gave consent to participate in the study. That's a large sample of 139 respondents Sampling technique purposive sampling Variables: Independent Compliance and Dependent Variable Quality of Life Instruments: Glas-gow Antipsychotics Side-effect Scale (GASS), The drug attitude inventory (DAI-10)and SQOL-18 Analysis: chi square and Fischer's exact test	Based on the study's findings, it can be concluded that only drug side effects have an impact on medication adherence, that sociodemographic factors have a significant impact on quality of life and that there is a significant correlation between medication adherence and quality of life while neither residence nor treatment adherence have a significant impact on quality of life.
11	Mediating Effect Of The Motivation For Medication Use On Disease Management And Medication Adherence Among Community-Dwelling Patients With Schizophrenia, [25]	Design: cross-sectional, descriptive correlation Subjects: Population of patients with schizophrenia A sample of patients with schizophrenia with criteria (1) diagnosed with schizophrenia based on DSM V; (2) aged 20-60 years; (3) get at least 1 type of antipsychotic drug; (4) willing to be a respondent Sampling technique convenience sampling of Large sample 373 patients with schizophrenia Variables: Independent factors that influence medication adherence, motivation, management-related factors Dependent medication adherence Instruments: the Global Assessment of Functioning (GAF), Brief Psychiatric Rating Scale (BPRS), and Glasgow Antipsychotic Side-effect Scale (GASS) Analysis: correlation and regression analysis	This study shows that roughly half of schizophrenia patients do not follow their treatment regimens. Length of hospital stay, symptoms, side effects of treatment, general health status, health facilities, knowledge, medical social support, and drug use motive were linked to drug use. Health facilities, knowledge, and medical social support also had a substantial impact on drug use. The desire to take medication is crucial for medication adherence if the illness management component is difficult to alter.

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S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
12	The Relationship Between Treatment Adherence and Social Support in Psychiatric Patients in the East of Turkey, [26]	Design: descriptive study Subjects: The population is patients who received treatment during the period September 2014 and July 2015 totaling 799 people with mental disorders (354 receiving treatment in the community and 444 patients being hospitalized in the clinic), the sample size determined was 324 patients with mental disorders, the sampling technique used was random sampling method with inclusion criteria: Lives in the city center, over 18 years old, can communicate verbally. Exclusion Criteria: First time hospitalization, Have organic brain syndrome or mental retardation Variable: Adherence to treatment and social support Instruments: Demographics Questionnaire (age, gender, marital status, educational status, employment status, people living with, educational status and employment status of spouse, income status, place of residence, diagnosis of illness, family members suffering from mental disorders in the family and illness other factors that may cause mental disorders), Morisky Medication Adherence Scale (MMAS) and Multi-Dimensional Scale of Perceived Social Support (MSPSS) Analysis: analysis of variance, dependent and independent samples t-test and Pearson correlation test, Mann–Whitney U and Kruskal–Wallis tests	The study's findings offer evidence and support for the following: Marital status and family support differ significantly, Patients who live alone experience major differences from those who live with others at home in terms of social support. Better social support, treatment compliance, younger test scores, male gender, family living, and greater educational status are all characteristics of patients with higher income status.
13	Does Spiritual Well-Being Affect Medication Adherence in Individuals Diagnosed with Mental Illness in Turkey? Abdurrezzak Gьltekin1 · Funda Kavak Budak1 Accepted, [27]	Design: correlational descriptive study Subjects: Population of 2500 adolescents who suffer from mental disorders and receive therapy Samples of people with mental disorders with criteria (1) are 18 years old and over; (2) able to communicate and cooperate in various treatments carried out. The time for data collection starts from July 2017 and May 2018 Sample size 410 people with mental disorders Sampling technique is simple random sampling Variable: Medication Adherence Instruments: description of individual characteristics, the spiritual well-being scale, and the Morisky medication adherence scale Analysis: independent samples t-test, analysis of variance, linear regression and correlation	According to the study's findings, there is a connection between a person's spiritual health and their adherence to their medicine after they have been diagnosed with a mental disease.
14	Medication Adherence Using Electronic Monitoring in Severe Psychiatric Illness: 4 and 24 Weeks after Discharge, [28]	Design: Prospective Design Subjects: A population of 81 people with mental disorders registered in the sample hospital People with mental disorders who meet the inclusion criteria, namely (1) diagnosed with schizophrenia or bipolar disorder based on DSM IV (2) aged between 18 – 65 years Sample size 52 respondents Sampling technique Variable: Dependent medication adherence Independent Instruments: Clinical Global Impression-Severity (CGI-S) scores, Drug Attitude Inventory (DAI) assessment, the Multidimensional Scale of Perceived Social Support (MSPSS, the Korean Wechsler Intelligence Scale (K-WAIS-IV) Analysis: The chi-square test, one-way ANOVA, and Kruskal-Wallis, The Mann Whitney,	According to the study's findings, there is a connection between a person's spiritual health and their adherence to their medicine after they have been diagnosed with a mental disease.

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S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
15	Medication Adherence Using Electronic Monitoring in Severe Psychiatric Illness: 4 and 24 Weeks after Discharge, [28]	Design: a cross-sectional and correlational research design. Subject: Sample size 92 respondents Sampling technique Convenience sampling Variables: Insight, religion, side effects, type of antipsychotic, social support from others nurse-client relationship Instrument: self-reported questionnaire Analysis: Descriptive analyses, Pearson Correlation Test, Chi-square test for association, linear and logistic regression analyses, Post Hoct	According to the study's findings, six factors (knowledge, religion, side effects, types of antipsychotics, social support from close friends, and nurse-client relationship) were found to be significant predictors of medication adherence, but the client's nurse-client relationship was not found to be significantly related to insight.
16	Analysis of Medication Adherence and Its Influencing Factors in Patients with Schizophrenia in the Chinese Institutional Environment, [29]	Design: A cross-sectional study Subjects: The population of schizophrenic patients was 807 patients with schizophrenia samples recorded from November 2018 to January 2019 with the criteria (1) Diagnosed with schizophrenia according to the DSM-5 criteria (2) Age 18 years - 70 years (3) continuous hospitalization for one month, (4) education above junior high school, (5) no visual or hearing impairment, (6) ability to be able to complete the given instrument independently, (7) participants/legal guardians/relatives gave written consent Sample size 217 people with schizophrenia Engineering Sampling A systematic sampling method Variable: medication adherence and the factors that influence it Instruments: The Medication Adherence Rating Scale (MARS), Positive and Negative Syndrome Scale (PANSS), General Self-Efficacy Scale (GSES), Schizophrenia Quality of Life Scale (SQLS), and Scale of Social Skills for Psychiatric Inpatients (SSPI) Analysis: descriptive analysis and ANOVA, linear regression analysis	Based on correlation analysis, the study's findings offer an explanation and rationale for why there is no correlation between medication adherence and symptoms ($p > 0.05$), but there is one between self-efficacy, quality of life, and activities of daily living ($p > 0.05$). < 0.01). Self-efficacy, psychosocial variables, symptoms/side effects, and daily activities all significantly influenced medication adherence, according to a linear regression analysis ($F = 30.210$, p 0.001).
17	Antipsychotic medication adherence and preventive diabetes screening in Medicaid enrollees with serious mental illness: an analysis of real-world administrative data, [30]	Design: cross sectional Subject: Population sample Size 5502 respondents Sampling technique random sampling Variables: Non-adherence in treatment, Instruments: Adherence Rating Scale (MARS), Positive and Negative Syndrome Scale (PANSS) Analysis: logistic regression models	According to the study's findings, getting older was strongly linked to better medication compliance, however the link between age and diabetes screening differs by sex. Education, in which this Education is also (associated with antipsychotic medication adherence), area associated with adherence and diabetes screening, and obesity (associated with adherence), is the characteristic that is significantly associated with the variation in quality according to one or both measures.
18	Cognitive insight is correlated with cognitive impairments and contributes to medication adherence in schizophrenia patients, [31]	Design: Cross sectional Subject: Population sample Size 5502 respondents Sampling technique convenient sampling Variables: Non-adherence in treatment, Instruments: Brief Adherence Rating Scale (BARS), Global Clinical Impression (CGI) scale, Analysis: logistic regression models	According to the study's findings, the relationship between insight and cognitive insight had a substantial impact on medication adherence.

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S/N	Author (year)	Sampling Method, Sample, Instruments used, Data analysis	Results
19	Medication Adherence in Adolescents with Psychiatric Disorders, [32] and to what extent parents' assessments of their offspring's attitudes toward treatment correspond with the adolescents' self-report. Methods: This study is part of the multicenter SEMA study (Subjective Experience and Medication Adherence in Adolescents with Psychiatric Disorders	Design: Multicenter SEMA study (Subjective Subjects: Population of children and adolescents with mental disorders sample of children and adolescents with mental disorders Inclusion criteria were: (1) ages between 12;0 and <18;0 years, (2) prescription of psychotropic drugs for the treatment of mental disorders for at least 2 weeks at the time of inclusion, and (3) general medical conditions that allowed participation. Sampling Technique Variable: Treatment adherence Instruments: (Questionnaire on Attitudes Toward Treatment) and the MARS (Medication Adherence Rating Scale) Analysis: logistic regression models	According to the study's findings, out of the n = 75 adolescents who took part, n = 45 (or 60%) were deemed to be totally compliant with treatment. Compared to patients who received different treatment combinations, patients who received monotherapy tended to be more fully adherent.
20	Impact of adverse reactions to first-generation antipsychotics on treatment adherence in outpatients with schizophrenia: a cross-sectional study, [33] shortage of psychiatrists and physicians, inadequacy of laboratory setups and unavailability of second-generation antipsychotics in the national list of medicines would seem to amplify the problem. This study's objective is to determine the impact of adverse effects of first-generation antipsychotics on treatment adherence in outpatients with schizophrenia at Saint Mary Neuro-Psychiatric National Referral Hospital. Methods: A cross-sectional study design was employed. All eligible adult patients with diagnosed schizophrenia (n = 242	Desain: cross sectional Subjek: Populasi sampel Besar sampel Teknik Sampling Variabel: adherence Instrumen: (Medication Adherence Rating Scale) Analisis: Chi-square tests	According to the study's findings, 35.5% of schizophrenia patients did not follow their prescribed treatment plans. For every unit rise in the overall ADR score, the probabilities of non-adherence increased by 1.06 (AOR = 1.06, 95% CI 1.04, 1.09). Patients were more likely to disobey orders when compared to their peers if they had extrapyramidal (AOR = 44.69, 95% CI 5.98, 334.30), psychological (AOR = 14.90, 95% CI 1.90, 116.86), hormonal (AOR = 2.60, 95% CI 1.41, 4.80), autonomic (AOR = 3.23, 95% CI 1.37, 7.57), or other reactions (AOR = 2.16 Conclusions: The extrapyramidal, hormonal, psychological, autonomic, and miscellaneous reaction categories of LUNSER, as well as the overall ADR score, were found to be significantly correlated with poor treatment adherence. To increase drug compliance,

gender, lower socioeconomic status, living alone, length of illness, drug abuse, education level, and severity of illness, such as being in the acute phase, participation in mental health services, access to facilities, and marital status, are all associated with greater awareness of the illness.

Two theories are frequently linked to persons with schizophrenia who are aware of their illness. Lack of awareness may result from psychological defense mechanisms used to avoid confronting the alleged sickness or from cognitive impairments that prevent people from fully comprehending their illness (15). The Transtheoretical Model can be used to explain previous history of medication adherence in relation to adherence (16). According to this concept, each person experiences pre-contemplation, contemplation, preparation, action, and maintenance stages before changing their behavior (16). Patients that exhibit adherence behavior have already entered the maintenance phase, which tries to stop the disease from coming back while also reaping the rewards of remaining compliant. Consequently, it is quite likely that these individuals will follow the following.

The perceived advantages of drug use influence attitudes toward treatment (2). Negative attitudes may also contribute to poor working memory, which may keep patients from reaping the full advantages of their medication (2). Due to their inability to make an informed decision to take medication, people with severe symptoms often fail to do so, which results in non-adherence. Social support involves both physiological and behavioral factors. Through physiological mechanisms, social support stimulates the neuroendocrine and autonomic nerve systems, which can aid a person in reducing stress. Social support can have an impact on health behavior through behavioral mechanisms. As a result, social support must help individuals by encouraging good health habits like medication compliance (17).

Based on research done on schizophrenia patients who are typically in clinical stability, it was shown that there is a connection between patients' insight and medication compliance. Here, clinical insight and understanding of the patient's knowledge are the two types of insight being examined. Knowledge can be a very powerful motivator or reinforcer for someone to learn to gradually change their behavior for the better, particularly regarding adherence to the treatment program that is followed, especially in this case for people with schizophrenia who do have a relatively longer time before their illness manifests. One of the patient's internal elements that influences adherence is the attitude component. According to the findings of various studies, a poor or One of the reasons why persons with schizophrenia don't comply to their treatment regimens is their uncooperative attitude toward it (19) . Age, fixed income, disease severity, and the presence of the disease's acute phase are additional influencing factors. Age also influences medication adherence. The elderly are motivated to maintain a healthy lifestyle and are always aware of their health (20). Improved medication adherence depends on the propensity to age up or get older (21,22). Those with schizophrenia, extrapyramidal syndrome effects, hormonal effects, psychological impacts on mood swings, or other categories of reactions, the side effects that occur are frequently the cause of non-adherence to treatment (22). Patients who receive monotherapy or one type of medication are more frequently entirely compliant with their treatment regimens than those who receive numerous drug combinations, and side effects of treatment will also grow when more therapies are used (23). This is because persons with schizophrenia experience perceived side effects that affect their everyday activities or quality of life (24). Some patients who get various antipsychotics can experience varying responses or outcomes, and this will also be a factor in determining how well they comply to their treatment plan (25).

In a broader sense, the person's attitude is the most important factor in deciding how they will feel about or adhere to the treatment they are receiving (25). Based on the study's results, it is clear that spiritual health and medicine adherence in those with mental illnesses are significantly correlated. Individual attitudes for following all prescribed treatment plans are influenced by a variety of circumstances, including their spiritual views (26).

Related to medication adherence in schizophrenia patients' families, social networks, or external environments. According to certain research, persons with schizophrenia do not take their medications as prescribed. Longevity of hospitalization, medical facilities, knowledge, medical social support, and drug-use motivation are all external elements that affect patients in general, therefore it makes sense to maximize this resource (27).

Implications of This Review

This literature review's findings can be used to build treatments based on the factors that have been discovered. Using the data acquired, nurses can influence their schizophrenia patients' clinical practice to increase medication adherence. Adherence to medicine is closely connected to disease awareness. By enhancing their understanding of illnesses and treatments, nurses can give clients and their families with psychoeducation about their illnesse (19) the treatment that must be taken, and which is no less important is how they follow the treatment program that has been set according to the rules, and if necessary must involve family members or support groups family, social or peer groups to be able to play an active role in being a treatment supervisor. Sessions on psychoeducation should cover topics including symptom management. According to the literature, another element that is connected to adherence is the existence of psychotic symptoms. Given that drug side effects are linked to adherence and have undergone extensive evaluation, nurses should be involved in examining drug side effects and monitoring drug use. (9).

Study limitation

This systematic review needs to take a number of study limitations into account. First off, out of the thirteen publications, the identification results were rather consistent because thirteen of them (19.7%) had nearly identical research findings yet came from distinct research sites. Additionally, the majority of the research (90.1%) used a cross-sectional design, making it impossible to establish a causal link. Aside from the study's limitations, there were a lot of papers examined, and they covered a wide range of topics, therefore the elements found in this literature review might be considered to be both internal and external factors that affect medicine adherence.

CONCLUSION

Overall, this research examined empirical data that revealed elements linked to drug adherence. These elements are crucial for creating treatments to increase adherence. Gaps in the literature were found, and future study and intervention ideas were also provided.

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