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# NONCOMPLIANCE TO MEDICATION IN PSYCHIATRIC PATIENTS

– a literature review

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# NONCOMPLIANCE TO MEDICATION IN PSYCHIATRIC PATIENTS

One in four people globally will be affected by mental disorders at some point in their life. Currently approximately 450 million people worldwide suffer from this conditions.

The aim of this project is to produce evidence based knowledge for nursing students and practicing nurses in the specialty of mental health about the reasons of noncompliance to medication in psychiatric patients.

What are the main reasons for noncompliance to medication in psychiatric patients?.

Methods, this research entailed systematic literature review utilizing electronic searches to gather relevant articles to answer the research question. These databases include CINAHL from the Nell portal. The search terms used were antipsychotic medication, compliance, concordance, adherence, psychiatric and mental health. six articles were selected.

Results: side effects, lack of family support, lack of patient to identify the disease, instability and homelessness, and fear of addiction to medication were the main reasons for medication noncompliance.

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Table 1.

# LIST OF ABBREVIATIONS

| | |
|---|---|
| NCCSDO | Centre for NHS Service Delivery and Organisation |
| WHO | World Health Organisation |
| OTC | Over-the-counter |
| LUNSERS | Liverpool university neuroleptic side effects rating scale |
| ROMI | Rating of Medication Influences Scale |
| HBM | Health Belief Model |
| DSM-IV | Diagnostic and Statistical Manual of Mental Disorders |

# 1 INTRODUCTION

The author having worked with mentally sick people during practical training for a period of 11 weeks realized that most of the clients had suffered for many years saw the need to know how psychiatric patients adhere to there medication given that mental diseases doesn't disappear in weeks or days, some even stagnate for lifetime, it present a challenge that requires knowledge.

By it is very nature psychiatric illnesses that impaires the judgment, insight, and stability places the psychiatric patients at risk for medication non-compliance (Kane, 1985).

The current emphasis in mental health on care in the community and the closure of hundreds of acute beds for mental patients have highlighted a lack of continuity, communication and general cohesion of services for patients suffering from schizophrenia and other forms of mental illness. Compliance is a major issue yet there is still a lack of systems for identifying or following up patients who are non-compliant with their medication. As patients move from secondary care to primary care they move from an environment where compliance is carefully supervised to one where compliance is almost entirely dependent on the patient. (Jarman, et al, 2010.)

# 2 BACKGROUND

2.1 Definitions

Mental health is defined as just not the absence of mental disorder. It is a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO. 2007).

Compliance is defined as: 'The extent to which the patient's behavior matches the prescriber's recommendations.' However, its use is declining as it implies lack of patient involvement. (NCCSDO, 2005.)

Adherence is defined as: 'The extent to which the patient's behavior matches agreed recommendations from the prescriber.' It has been adopted by many as an alternative to compliance, in an attempt to emphasize that the patient is free to decide whether to adhere to the doctor's recommendations and that failure to do so should not be a reason to blame the patient. Adherence develops the definition of compliance by emphasizing the need for agreement. (NCCSDO, 2005.)

The term concordance, is used to describes a more patient-centered approach to prescribing and the taking of medicines. This term was originally defined as 'a new approach to the prescribing and taking of medicines' (Medicines Partnership 2003). An agreement is reached after negotiation between a patient and a healthcare professional, which respects the beliefs and wishes of the patient when determining whether, when and how medicines are to be taken. In this alliance, the healthcare professional acknowledges the patient's right to make choices about taking the recommended medications. Medicines Partnership 2003. (Kaufman & Birks 2009, 51-57.)

The World Health Organization (WHO, 2003) defines adherence as "the extent to which a person`s behavior-taking medications, following diet, and or executing lifestyle changes, corresponds with agreed recommendations of a healthcare provider" the term adherence has gain popularity over other terms

such as compliance, persistence, concordance and treatment alliance because it encompasses all aspects of treatment (Hardeman, et al, 2010, 3).

Mental illness in it very nature is characterize by many years of suffering and therefore calls for the need to be preveted also, in this case, Mental disorder prevention aims at "reducing incidence, prevalence, recurrence of mental disorders, the time spent with symptoms, or the risk condition for a mental illness, preventing or delaying recurrences and also decreasing the impact of illness in the affected person, their families and the society" (Mrazek & Haggerty, 1994.)

Although medication has prove to be one tool that can help and improve the life of psychiatric patient, medication nonadherence is the primary focus of this article, it is only one form of nonadherence. Poorer health outcomes may also result when a patient does not adhere to recommended lifestyle changes, such as exercise or smoking cessation, or to prescribednonpharmacologic interventions, such as physical therapy or dietary plans. Pharmacists who counsel patients with chronic diseases, such asasthma, hypertension, or diabetes, need to assess and promote adherence to these nonpharmacologic treatments as well. (Nichols & Poirier, 2000.)

Medication nonadherence is a major public health problem that has been called an "invisible epidemic. Nonadherence to pharmacotherapy has been reported to range from 13% to 93%, with an average rate of 40%. The problem encompasses all ages and ethnic groups. It has been estimated that 43% of the general population, 55% of the elderly, and 54% ofchildren and teenagers are nonadherent. A host of individual characteristics also influence adherence, such as the patient's religion, health beliefs, social support system, and ethnicity. . (Nichols & Poirier, 2000.)

Rates of nonadherence vary with different disease states. For example, the nonadherence rate for hypertension is reported to be 40%, while that for arthritis has been found to range between 55% and 70%. Nonadherence rates are especially high among patients with chronic diseases. These patients, who

typically require long-term, if not life long medications to control symptoms and prevent complications, often must make significant behavioral changes to adhere with pharmacotherapy.Such changes can be difficult to integrate into everyday life. Nonadherence to pharmacotherapy has been shown to decrease productivity and increase disease morbidity, physician office visits, admissionsto nursing homes, and death. (Nichols & Poirier, 2000.)

The diagnosis of mental disorders is made on the basis of signs and symptoms of aberrant thoughts, words, and behaviors. As yet there are no laboratory tests to diagnose these illnesses. Clinical research continues to refine our understanding of the symptomatology, natural course, co-morbidity, and treatment effectiveness for mental disorders. Continuing research on epidemiology provides needed data on incidence, prevalence, prodromal periods, and age of onset. (National Institute of Mental Health, 2009.)

2.2 Prevalence

One in four people globally will be affected by mental disorders at some point in their life. Currently approximately 450 million people worldwide suffer from this conditions thereby placing mental health disorders among the leading causes of illness. Although treatment with psychotropic medication for specific psychological interventions has been demonstrated to be beneficial, it is also associated with relapse due to non-adherence to the medication regime. ( Susan, M. et, al, 1997.)

Patients with psychiatric illness typically have great difficulty following medication regimen, but they also have greatest potential from drug adherence. Half of the patients prescribes with antidepressants will not be taking the drug three months after the initiation of the therapy, rates of adherence among patients with schizophrenia are between 50 and 60 percent,  and among those with  bipolar affective disorder the rates are as low as 35%. ( Osterberg & Blashke. 2005, 493.)

Medication noncompliance is thought to be a major factor in psychiatric hospitalizations. Many individuals with psychiatric disorders are hospitalized for an exacerbation of their mental illness, stabilized with medications, and then discharged home. At home, a large number fail to take their medications properly, if at all. Relapse often occurs and re-hospitalization follows (Crane, Kirby, & Kooperman, 1996.)

Prevalence studies show similar rates of non-adherence to treatment across medical and psychiatric conditions. In 2007, the National Council for Patient Information and Education found that people take approximately 60% of prescribed medication. In chronic conditions, adherence rates are estimated to be 50% (WHO, 2003). In an older study, Cramer and Rosenheck (1998) reviewed 46 papers on adherence rates for antidepressants and antipsychotics, and medications for physical problems. On average, patients prescribed with antipsychotics took 59% (range 24–90%) and patients prescribed with antidepressants took 65% (range 40–90%) as opposed to 76% (range 40–90%) in patients prescribed with medications (Hardeman & Narasimhan, 2010. 4.)

The adherence rates in mood and psychotic disorders are as follows, All Mood Disorders, 10–60%, with a median of 40%, Major Depression, 65% in acute treatment phase (first three months after diagnosis), 44% in maintenance phase (6months after initial diagnosis). Bipolar Disorder, 32% reported partial adherence, 50% reported adherence within the past 2 years, 50% partial adherence to anticonvulsants or lithium, 34–80% (mean 41%) adherence to long-term prophylactic therapy depending on medication. Psychotic Disorders, 50–54% first- and second generation antipsychotics, For physical disorders. The efficacy of medication in controlling or ameliorating symptoms of psychotic conditions is well established in clinical trials, but medication effectiveness in mental health services is considerably affected by the extent to which clients actually comply with their prescribed medication. (Hardeman & Narasimhan, 2010. 4.)

Medication non-compliance is a common factor leading to re-lapse, admission and re-admission to mental health hospitals. Often medication non-compliance

initiates a cycle that begins with and emergency detention. Law enforcement personal brings the person to the psychiatric emergency department often mechanical or chemical restraints are indicated to manage acting out behavior. From this point the person may be admitted for inpatient, outpatient or released. Sotiropoulos & Poetter et al. review paper.

In Finland, involuntary psychiatric treatment is regulated by the Mental Health Act (1116/1990) passed in 1991. The Mental Health Act defines the parties responsible for organizing mental health work and regulates involuntary psychiatric treatment as well as the assessment and treatment of mentally ill offenders.( Salize, et al, 2002.)

Failure to adhere to medication, either willfully or inadvertent has been term noncompliance with medication regimens. Noncompliance can take different form from failing to fill prescription, taking less or more medication than prescribed, taking someone else medication, failing to comply with time. (National Institute of Mental Health. 2009.)

Anyone can develop a mental illness - you, a family member, a friend, or a neighbuor. Some disorders are mild; others are serious and long-lasting. These conditions can be diagnosed and treated. Most people can live better lives after treatment. And psychotherapeutic medications are an increasingly important element in the successful treatment of mental illness. (American Mental Health Channel. 2009.)

History of this medication

In Finland, the first mental hospital, Lapinlahti Hospital, was founded in 1841. Before that, mentally infirm people were located in or expelled, together with people suffering from leprosy, to the island of Seili on the south-western coast of Finland. The acutely mentally ill were treated in provincial general hospitals, and if they did not recover they were transferred to Lapinlahti Hospital, and since the end of the 1800s to other mental hospitals, which were founded in the neighbourhood of the largest towns. (Salokangas, R, K. 2004.)

Psychotherapeutic medications also may make other kinds of treatment more effective. Someone who is too depressed to talk, for instance, may have difficulty communicating during psychotherapy or counseling, but the right medication may improve symptoms so the person can respond. For many patients, a combination of psychotherapy and medication can be an effective method of treatment. (National Institute Of Mental Health. 2009.)

# 3 PURPOSE AND AIMS

3.1 Purpose and Aims

The aims of this project is to produce evidence based knowledge for nursing student and practicing nurses in the specialty of mental health about the reasons of noncompliance in drugs in psychiatric patients.

 3.2 Research question

What are the main reasons for non copmplince to medication in psychiatric patients ?.

# 4 METHODS

## 4.1 Litrature review process

Literature review is defined as a summary of research on a topic of interest often prepared to put a research problem in context (Polit and Beck 2008).

literature review is a review of the evidence on a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant primary research, and to extract and analyze data from the studies that are included(Gerrish & Lacey, 2007, 317).

This research entailed systematically searching the literature, selecting relevant studies, assessing the quality of the literature, extracting key information from the selected studies, summarizing, interpreting and presenting the findings, and writing up the research in a structured manner.

The author utilized electronic searches to gather relevant articles. These databases include CINAHL from the Nell portal. The search terms used were antipsychotic medication, compliance, and concordance, and adherence, psychiatric and mental health. the searches were based on title and as a abstract, the final results hits from the title were 8278 while from the abstract were 7387, this two were combined to get a total number of 870 hits, limited to full text only 216 hits were found. The author read through the abstract of all the 216 articles mention and selected 21, 6 Articles, 15 articles were discarded as the author found that the information was not related to the topic of interest, of this 15 articles 10 articles talked about medical noncompliance in psychiatric patients who were also suffering from other illnesses like diabetes, HIV & Aids, and other form of illnesses. the remaining 5 articles talk about management of psychiatric ill patients but not necessarily in general psychiatric but as a specific illness, i.e. one article talked of managing schizophrenia patients, this the author found that it could be of less importance to his research in relation to the topic of interest. The 6 chosen articles were however deems fit and useful to answer the research question posed in this research.

The selected articles used Several method in collecting data, like structured questionnaires, surveys and interviews, it is worth noting that of the six chosen articles 5 articles used interviews two using semi structured while three use structured interviews. Four articles also used questionnaires with 2 articles using closed ended type questionnaire of yes-no type,

The sample of the studies varied a lot with the lowest being 6 patients, this was done in South Africa they where purposely selected after they realized they had problem in complying with medication, two were bothers, and the language of interview was done in Tswana then later translated to English, it was a descriptive study,

The inclusion criteria for most articles differed; two articles required that the patient had to meet the DSM-IV form requirement for schizophrenia and schizoactive disorder, one articles selected participant who met the diagnosis and disabling mental disorder ICD-10 categories and that they had to have the ability to give consent, only three article considered age in the inclusion criteria that is (18-64), (18-65), and (16-79) years consecutively. Race and sex was not considered in any of the articles, only one study considered the level of education as it was part of the research to investigate how level of education influence non-compliance

Two articles used the Liverpool university neuroleptic side effects rating scale (LUNSERS) to assess the side effects, Measures were selected on the basis that they were valid and reliable measures of one or more component of the specific health belief model (HBM) being evaluated. The following instruments were used: Rating of Medication Influences Scale (ROMI for measuring the general attitude towards medication, supplemented by three additional questions, Lithium Side Effects Questionnaire (LSEQ) or Liverpool University Neuroleptic Side Effect Rating Scale (LUNSERS) to assess the side effects of medication; Dysfunctional Attitudes Scale (DAS-24) to measure the dysfunctional attitudes on three sub scales i.e. achievement, self control and dependency, and the Multidimensional Health Locus of Control Scale (MHLC).

One research also did random selection of participants within a period of three months in 2009 at Punjab institute of mental health (PIMH). Patients were selected randomly indoor and outdoor of the hospital data was collected by questionnaire.

The population of this study represents diverse cultures, races ages, education and sexes, one research was done at Lahore mental hospital Pakistan, data collection took three months, and two were done in the UK at Newcastle and in 28 inpatient wards at 8 hospital in Northwest of England (Merseyside and Cheshire) and North Wales (Gwynedd and Clwyd) in a period of 3 years. Two other studies were done in United States, at New York City general hospital on in this article was mention over representation of black at 58%, the other was in Philadelphia, and one research was done in South Africa Mmametlhake health district.

Most of those who were excluded were mainly because of poor English language skills as all the researches were conducted in English except the one done in South Africa, it is also important that some patients refuse to participate and thus were eliminated from the study. In all the research under review here the patients had to sign the informed consent form so as to participate in the research,

Several methods of analyzing data were use, in one research Non-parametric analyses including the x (with Yates' correction), Fisher's exact and Mann-Whitney U-tests were used to identify variables that differentiated between highly adherent(HA) and partially adherent(PA) categories, Student's t test was used for comparisons involving continuous variables. The chi square test was used for comparisons involving categorical variables, one study used grounded theory for analysis, Fisher's exact and chi-square were used in two articles, Morisky scale was also used and van putten scale, also spss version 16.0 and cross tabulation were used.

4.2 content analysis

The six articles article provide a rich source of information about medical non-compliance in psychiatric patient, each of the article approach the problem from a different perspective, i.e., one article sought to identify predictors of noncompliance with medication in a cohort of patients with schizophrenia after discharge from acute hospitalization. Another articles carried out a study to understand the reasons for noncompliance to treatment among patients suffering from psychiatric illnesses. While a study carried out in the UK explored the utility of health belief in examining medication adherence in subjects with severe and disabling mental disorders, in the us a research was done to assess medication compliance (adherence) in patients as reported to a pharmacist rather than to a professional caregiver this research sought to understand if the participants were more free and open to a pharmacist than a physician. Also in the UK another research was carried out to determine relations between clinical and service variables and attitudes toward medication in people with a diagnosis of schizophrenia and schizoaffective disorder. Finally in Pakistan a research was done to determine compliance level of the psychiatric patients, causes, severity of non-compliance, major factors contributing to noncompliance.

From the different approach above four articles pointed out side effects of medication a contribution to non-adherence, failure by the physician to explain to the patient clearly the advantages of medicine was mention in three articles, another major problem is lack of family support and homelessness mention in three articles, still three articles talked about the patient fearing to get addicted to medicine,  among other problem found are,  substance abuse,  fear of injection lack of continued care,
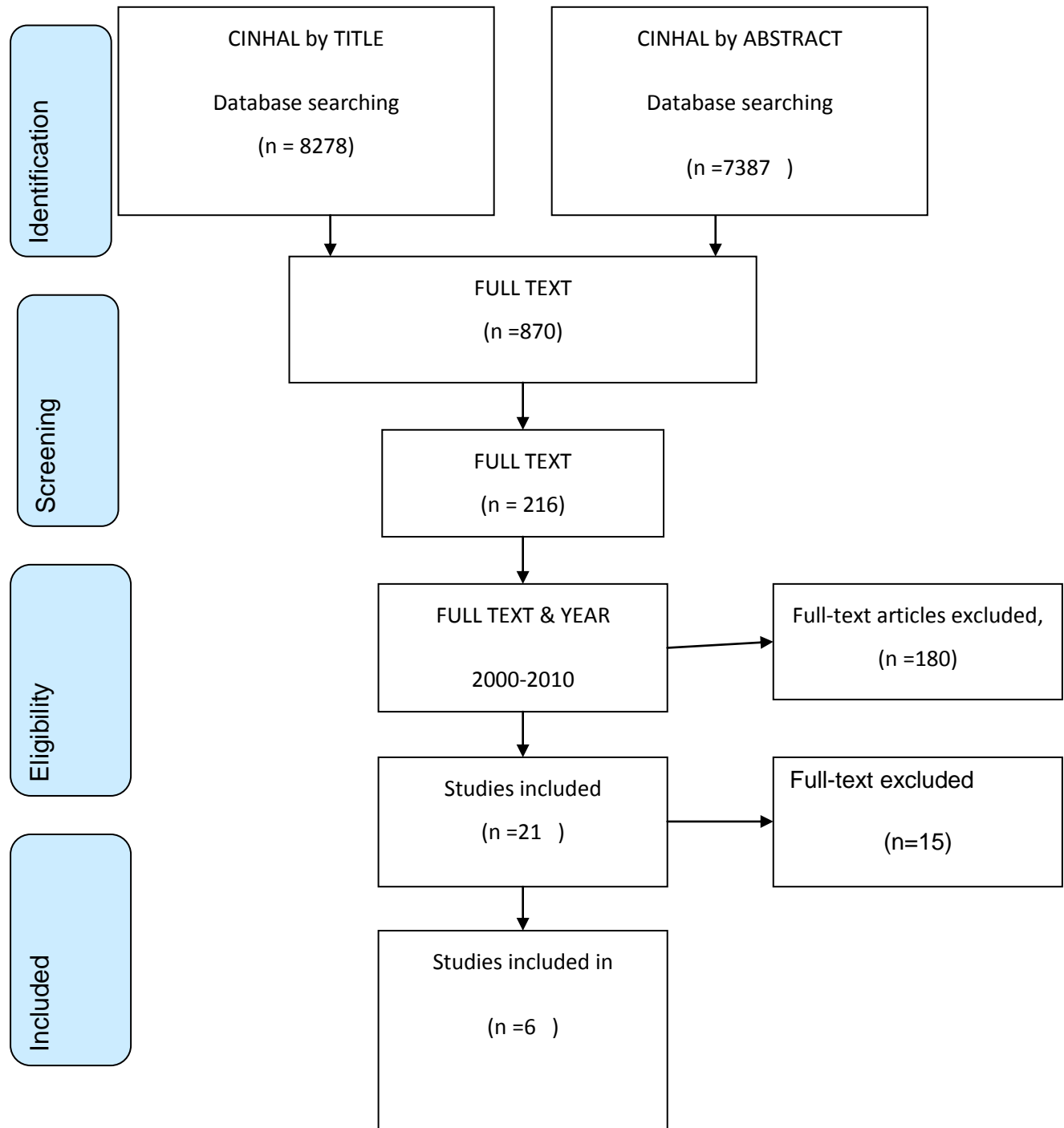
Among those who were compliant, re-hospitalization was a strong reason for adherence, good family support, patient involvement in treatment plan, good relationship with the prescribers,

One article also discuss compliance according to age, sex, level of education, distribution of drug by therapeutic class and mean compliance score, and reasons of non compliance as given by the patient, of which women were found to be more none compliant, the highest compliant age was between (30-49), as in drugs antidepressants was the less adhered to medication and it was found that patients takes the drug only when symptoms occurs.

Finally one researching about the reason of non-compliance found out that Compliance level major reasons were classified into four; patient willingness, (fully agreed), ( partially agreed), (not agreed), and (showed resistance), behavior of the patient also contribute to non compliance; (communicative, cooperative, mute), partial compliance is a major contributing factor for non adherence, relapse occurred due to poor compliance.

## 4.3 Result

### PRISMA 2011 Flow Diagram

| Identification | CINHAL by TITLE<br>Database searching<br>(n = 8278) | CINHAL by ABSTRACT<br>Database searching<br>(n =7387 ) |
|---|---|---|

FULL TEXT
(n =870)

| Screening | FULL TEXT<br>(n = 216) |
|---|---|

| Eligibility | FULL TEXT & YEAR<br>2000-2010 | Full-text articles excluded,<br>(n =180) |
|---|---|---|

| | Studies included<br>(n =21 ) | Full-text excluded<br>(n=15) |
|---|---|---|

| Included | Studies included in<br>(n =6 ) |
|---|---|

| Author | Title | Aims &purpose | Methods | Sample & No of participants | Results | Implementation/conclusion |
|---|---|---|---|---|---|---|
| Olfson, M. Mechanic, D. Hansell, S. Boyer, A, C. Walkup, J. Weiden, J, P.  2000.  New York, U.S.A | Predicting Medication Noncomplia nce After Hospital Discharge Among Patients With Schizophren ia | The study sought to identify predictors of noncompliance with medication in a cohort of patients with schizophrenia after discharge from acute hospitalization. | Data came from the longitudinal patient outcome phase of the Rutgers hospital and community survey, | The population sample in this study was, (N=213) | Medication noncompliance was associated with; increased risk of re hospitalization, homelessness, symptoms exacerbation, history of medication noncompliance, substance abuse, difficulty in recognizing their symptoms. | Patients with schizophrenia at high risk of noncompliance after acute hospitalization are characterized by: difficulty in recognizing their symptoms, lack of family support, medication noncompliance history, substance use |
| Sharif, S, A. Ogunbanjo, GA. Malete, NH.  2003  S Africa. | Reasons for non-compliance to treatment among patients with psychiatric illness: | The study was carried out to understand the reasons for noncompliance to treatment among patients suffering from psychiatric illnesses. | This is a descriptive, qualitative study done using a free attitude interview technique | 6 non-compliant patients from 5 families, were selected purposely, 2 were brothers. | Side effects of mediation was the most common reason for medication noncompliance, other reasons were: poor insight about the illness, lack of support and care from family, non involvement of patient in their own management, | Noncompliance to medication can be reduce by, co-operation between the primary care clinicians, patients and their caregivers putting into consideration the above mention reasons. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Adams, J. Scott, J. 2000. UK | Predicting medication adherence in severe mental disorders. | This study explored the utility of health belief in examining medication adherence in subjects with severe and disabling mental disorders | Rating of medication influence scale(ROMI) was used which consisted of semi structured interviews and Questionnaires were also used | 41, subjects were recruited, but t 2 were Over 65 years, so data on 39 subjects were analyzed, 22 males and 17 females, 2/3 had affective disorder and 1/3 had schizophrenia | Highly adherent and partially adherent subjects differed significantly in their perception of illness severity, their beliefs about themselves and their control over the disorder, and their concerns about Further hospitalization. Two components of the HBM (health belief model) (perceived severity of illness and perceived benefits of treatment) explained 43% of the Variance in adherence behavior. | clinical assessment of components of the HBM may improve the detection of patients at risk of medication Non-adherence. |
| Yegenoglu, S. Wertheimer, L, A. Dubin, R, W. 2003. Turkey. | Demographi cal Factors Affecting Patient Compliance( Adherence) to Medications In An Outpatient Psychiatric Clinic: A Preliminary study | The aim is to assess medication compliance (adherence) in patients as reported to a pharmacist rather than to a professional caregiver. | Interviews were conducted based on eight questionnaire items with four ended question: yes-no type, Data analyzed using t-test and chi-square | Total of 184 patients were ask to participate, 64 refused, 120 interviewed of which 83 were female and 37 males | Of the 120 patient 84 were compliant and 36 were not, non compliance was high with female, with 22 of the 36 and 14 for males, medication compliance by education level was good with | Health care professionals can play a pivotal role in helping to increase medication compliance, i.e. pharmacist can reinforce the importance of medication intake as well as adherence by educating the patient. Educating the patient about the nature of his/her disease and medications increases the likelihood of compliance. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Day, C, J. Bentall, P, R. et al.<br><br>2005.<br><br>North Wales, England. | Attitudes Toward Antipsychotic Medication | To determine relations between clinical and service variables and attitudes toward medication in people with a diagnosis of schizophrenia and schizoaffective disorder. | Data were analyzed by a proportional odds model and structural equation modeling to test predicted paths between experience of admission, relationship variables, attitudes toward treatment, | Total of 228 meeting DSM-IV criteria, agreed to participate, 23 refused, age range was 16-67 years, 64 females, 164 males, | Attitudes toward treatment were predicted by insight, relationship with staff (especially the physician-prescriber), and (the patient's admission experience ) the results showed that A poor relationship with the prescriber, experience of coercion during admission, and low insight predicted a negative attitude toward treatment. | The quality of relationships with clinicians during acute admission appears to be an important determinant of patients' attitudes toward treatment And adherence to medication. Enhancing such relationships May yield important clinical benefits. |
| Mahmood, T, K. et al /J. Pharm.<br><br>2010.<br>Lahore, Pakistan. | Adherence To Drug Therapy In Psychiatric Patients.<br><br>The year; 2010 | To determine compliance level of the psychiatric patients, causes, severity of non-compliance, major factors contributing to non-compliance | Data was collected by questionnaires , analysis done by SPSS version 16.0, cross tabulation used in the form of frequencies and chi-square test. | Recruitment took three months with 128 patients pick randomly from Punjab institute of mental health (PIMH) | Compliance level major reasons were; patient willingness, (fully agreed), ( partially agreed), (not agreed), and (showed resistance), behavior of the patient also contribute to non compliance; (communicative, cooperative, mute), partial compliance is a major contributing factor for non adherence, relapse occurred due to poor compliance, | Non adherence involves multiple factors, large number of  doses, bad taste, substance abuse, physician failure to explain the positive effects of treatment, inability of the physician to indentify non adherent  patient, health care cost, |

# 5 DISCUSSION

After reading and analyzing the six articles it is clearly evident that side effect is a major reason of non-compliance, being mention in four articles. In some cases the patients preferred the experiences of symptoms related to the disease than the medication side effects , the respondent used expressions such as *"sleepy", "weak"*, "powerless", "*no energy"*, to highlight the side effects. She complain that *"the pills make me sleepy, my tongue is always out of my mouth with drops of saliva  coming out"* and *"I cannot even speak"*  this occurred irrespective of the medication they took (Sharrif &Ogunbanjo, 2003, pg, 11), in another article it was  found that; Opposition to the idea of taking medication due to a belief of lack of medication activity and occurrence of physical  side effects were the most frequent reasons for discontinuing medication intake (Yegenoglu & Dubin. 2003.)

In a study done by (Olfson et al, 2000 pg 221), It is interesting that patients treated with clozapine or risperidone tended to be less likely to become medication noncompliant, although this relationship was not statistically significant. Possible explanations for this association include the less disturbing side effect profile of the newer antipsychotic medications or their superior clinical effectiveness. Increased compliance was noted among patients who received the newer atypical antipsychotic medications. Patients who remained medication compliant also tended to receive lower mean dosages of antipsychotic medications as measured in chlorpromazine equivalents. (Olfson, et al, 2000.  220.)

Lack of family support is another major contributor to noncompliance as one patient *said "they (the family members) chased me away",* another patient attributed his default of treatment to family discord: *"I skipped four months because we had difference of opinion at home",* (Sharrif &Ogunbanjo, 2003, pg, 11), The availability of family to help patients has been consistently shown to be

associated with improved medication compliance. In the study reported here, little evidence was found that family visits or family therapy sessions during the hospitalization were related to future medication compliance. However, patients whose families refused to participate in treatment were at high risk for stopping their medications. (Olfson, et al. 2000. 221.)

The third most common cause of noncompliance is the lack of the patient to realize the disease, the highest mean compliance rate was among epilepsy patients, this findings suggest that these patients are more aware of the nature of their disease and the importance of being compliant with their medication, (Yegenoglu, Wertheimer & Dubin, 2003, pg 83), the association found between adherence and perceived benefits of treatment particularly prevention of hospitalization is logical and may reflect the reported relationship between insight and adherence in people with mental disorders,(Adams & Scott, 2000, pg 122), in addition to confirming that insight and attitude towards treatment are important variables in predicting adherence to medication,it was confirm that the importance of therapeutic alliance with the clinician  was important, (Day, et al, 2005, 723.)

The other  problem found in this research and quoted by two articles is housing instability and homelessness, (Mahmood, et al 2010). Also the  fear of addiction to medication is a contributing factor.

# 6 VALIDITY AND RELIABILLITY

Reliability is essentially concerned with error in measurement (McDowell & Newell 1996, p. 37) i.e. how consistently or dependably does a measurement scale measure what it is supposed to be measuring (Polit & Hungler 1995). The premise for conducting reliability tests is that there will always be a degree of random error in the administration of measurement scales. An example of a random error is a mistake in measurement due to the respondent or rater being distracted. Reliability assesses 'the extent to which a score is free of random error. (Bannigan & Watson, 2009)

Once a measurement scale has been shown to be reliable over time it should be assessed to establish whether or not it is reliably measuring what you want it to measure (Utwin 1995). Validity is concerned with the meaning and interpretation of a scale. (Bannigan & Watson, 2009)

This research relied on already published scientific research articles, which has undergone scrutiny and critcism and which are available in scientific databses, the means In which measurements were done followed already approved standard scales i.e LUNSERS, ROMI, HBM, DSM-IV, in which the primary researches were done, i must note that all the articles followed these scientific standards,  this research included different ways of idendifying noncompliance in psychiatric patients in accordance to the research question, and in most cases the result have pointed to the same direction, That is: side effects, lack of family support, Lack of patient to identify the disease,instability and homelessness, and fear of addiction to medication. The research articles represented most part of the world, i.e America Europe Africa and Asia.

However there are some limitation in the study Given the immense population of people suffering from mental illnesses, the diversity in which each one of them react to medication and handle medicine has not been explored deeply, The research did tell us in one article that newer medication had less side

effects, This leaves a gap as in what is the situation at the moment given that all articles in this research mention side effects as the major cause of noncompliance.

# 7 CONCLUSION

This research has demonstrated that regardless of the disorder, nature of treatment, ethnic background, personality of the clinician, cost of medicine or any other factor, None adherence to medication is widespread, and it is not about to cease, in anycase it is a starring challenge, and so management of psychiatric illnesses can be improved by addressing the problems mention above and it is not a one person solution but a team work and alliance involving family members, medical personel, and the patients themselves, also patients education is important.

However futher research need to be done in various context, to determine the effects of the latest medical intervention to understand futher the public awareness concerning medicine noncompliance. because new ways and ideas have comes bringing new solution.

# 11 SOURCE MATERIAL

Adams, J.; Scott, J. 2000. Predicting medication adherence in severe mental disorders: Acta Psychiatr Scand. Vol. 101, 119-124.

http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=4&hid=25&sid=860cedec-11bd-4ed3-9777-25f807f2553e%40sessionmgr10

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Crane, K,; Kirby, B.; & Kooperman, D. 1996. Patient compliance for psychotropic medications: A group model for an expanding psychiatric inpatient unit. Journal of Psychosocial Nursing. Vol,34 No1, 8-15.

Day, C, J.; Bentall, P, R.; et al. 2005. Attitudes Toward Antipsychotic Medication: The Impact of Clinical Variables and Relationships With Health Professionals; Arch Gen Psychiatry. Vol. 62, 717-724.

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| | Acquiesce | 16 | Title |
| | Abide | 60 | Title |
| | Adherence | 10148 | Title |
| | Medication | 30328 | Title |
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| | S15 | 7074 | S11,S14 |
| | S16 | 61 | Full text and year 2010 |

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