

Original Research Paper

A Study on the Attitude of Patients and Relatives towards Covert Medications

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ABSTRACT

Background: Covert medication is the process of administering medication to patients without their knowledge but keeping the patient's best interests in mind. There have not been many studies in the area especially on the attitudes of patients and relatives. The study was thus aimed to study the attitudes of patients and relatives towards covert medication administration.

Methodology: Patients and relatives attending a tertiary general hospital outpatient department were administered a questionnaire to assess attitudes of the patients and relatives towards the use of covert medication and the reactions of patients towards the same. 100 patients and 100 relatives that attended the out-patient department between January and December 2018 answered the questionnaire. Data analysis was done with the help of computerised software and appropriate statistical tests were applied.

Results: 56% of the sample had schizophrenia and related disorders, 36% had mood disorders and 8% had substance use disorders. 75% of patients had a family history of psychiatric illness. The majority of them (98%) had lost trust in their family members after they found out that they were giving covert medications. Before giving covert medications, caregivers tried various other modes of treatment as follows viz. 10% showed to faith healers, 8% gave depot injectables, 7% beat the patient, 6% resorted to physical restraint by tying the patient and 4% locked the patient, 3% had forcefully admitted patient to a rehabilitation center.

Conclusion: Further studies across diverse populations are needed to validate the findings of this study. Patients in general have an unfavorable attitude towards covert medication while relatives did not mind the same as long as it benefitted the patient.

Keywords: Covert medication, patients, relatives, ethics.

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Introduction

Covert medication is the practice of administering medication to unwilling patient in disguised form generally in food or beverages without their knowledge but given in their best interest. Concealed, disguised, surreptitious, subterfuge or hidden administration of medicine are another not uncommon terms used interchangeably for covert medication [1]. The term 'surreptitious medication' and its use is rather reserved for non-therapeutic intention. In other term, Covert

practice is involuntary practice that it is without patient's consent and patient's will, so many critics believe that it is unacceptable on ethical and legal background. Covert administration of medication practice is widespread in psychiatry including other specialities like medicine, paediatrics and in geriatric medicine since many decades [2-3].

The need for administering covert medication arises from patient's refusal to take medication due to lack of insight into the disease either temporary or permanently as in psychiatric setting as well as patient who have lost capacity to give consent for treatment as in medical setting. In emergency medicine, patients of head trauma, delirium, comatose patient are admitted, they are unable to give consent but are treated without an informed consent by medical professional, where such authority is given by common law. In psychiatric setting, patients with acute psychosis who refuses treatment and treatment noncompliance are the two main causes which let family member /caregiver to consider for covert administration of medications. As treatment noncompliance in psychiatric patients is associated with increase suffering of family member and poor prognosis in the long run, so to improve patient care, family member/caregiver often gives medicines in disguised form mixed in their food /beverages after convincing and trying number of options [4-5].

Some developed countries have laid covert medicine guideline for medically ill patient who are unable to give consent and decision to give covert medicine, given in their best interest and the decision is taken following discussion with multidisciplinary team including caregiver/representative of patient. - However covert medication guideline nowhere mentioned in literature for mentally ill patients. Covert administration of medication is considered illegal in most of countries where there is being increased importance accorded to respect for individual autonomy. In developing countries, covert practice is always surrounded by secrecy and mental health professional is afraid to document this practice in patient's note or care plan because of professional censor and questionable legality of practice, which warrant attention. There is not much data available for prevalence for covert administration of medicine in India. We found very sparse literature that throws light on covert medication among population having mental illness. [4-5].

With the above considerations in mind, we decided to study actual percentage of patients who had been given covert medication and if at all, they had, was it beneficial or not, and finally awareness and responses of patients and caretaker regarding covert medicines.

Methodology

This cross-sectional study was undertaken in patients on psychotropic medicines for various psychiatric conditions and their caregivers, following up in psychiatry OPD of a tertiary care hospital. 100 patients with psychiatric illness and 100 caregivers fulfilling inclusion and exclusion criteria were interviewed between January 2018 to December 2018.

Inclusion Criteria

- Diagnosed as having psychiatric illness according to DSM 5 criteria [6]
- Patients and relatives willing to participate after informed consent.
- Patients with the caregiver and patients in position to understand the questions and cooperating with us.

Exclusion Criteria

- Patients without attendant/caregiver
- Uncooperative/ Agitated patients
- Minor (age<18years).

The following materials were used for interviewing the patients:

- A specially prepared questionnaire for patient to collect information about:
 1. Socio-demographic aspects, clinical profile of patient
 2. DSM diagnosis
 3. Whether /not received concealed medicines in past and their attitude toward covert medication

The following materials were used for interviewing the caregivers:

A specially prepared questionnaire for caregiver to collect information about:

a. Socio-demographic aspect

b. Whether/not they gave concealed medicines and their attitude toward covert medication.

Institutional Ethics committee approval was taken before starting the study. Informed consent was taken. The demographic profile was collected in the semi-structured proforma. Patients diagnosed with psychiatric illness using the DSM 5 criteria were then interviewed using the special proforma for collecting information of whether in the past they had received disguised medicine in food/drink, how they came to know and what was their reaction when they realised about concealed medication, questions regarding their further trust in their caregivers, their attitude toward covert medication. Similarly, caregiver of same patients who came for follow up in psychiatry OPD were then interviewed using the separate proforma to collect information about whether in the past they had given disguised medicine to patient in food/drink, need for giving covert administration, duration, methods tried before giving covert medicines, effectiveness, their response, and attitude towards covert administration of medicines.

Statistical analysis

The data obtained was entered into MS Excel sheet. Data analysis was done with the help of computerised software and appropriate statistical tests were applied. Two – tailed ‘p’ value was obtained for all statistical analysis and score of $p \leq 0.05$ was considered as statistically significant.

Results

Table 1: Demographic details of study population

Parameter		Patient (n=100)	Relatives (n=100)	t / χ^2 , p value
Age in Years		39.40 ± 3.34 (20-78)	40.34 ± 12.4 (20-66)	0.73, 0.46 ^{NS}
Gender	Male	51	51	0.0, 1.0 ^{NS}
	Female	49	49	
Education in Years		7.94 ± 4.73 (0-16)	8.99 ± 4.28 (0-16)	1.64, 0.1 ^{NS}
Religion	Hindu	41	41	0.0, 1.0 ^{NS}
	Non-Hindu	59	59	
Marital	Married	72	86	5.9, 0.01*
	Unmarried	28	14	
Family	Nuclear	35	39	0.34, 0.55 ^{NS}
	Joint	65	61	
Employment	Employed	53	64	2.49, 0.11 ^{NS}
	Unemployed	47	36	

Table 2: Response of patients regarding covert medications

Questions	Yes	No
Did you receive covert medications?	32	68
Did you come to know about being given covert medications?	22	78
How did you come to know that you were given covert medications? (Overlapping Data)	Taste	22
	Smell	9
	Vomiting	6
	Drowsiness/sleepiness	11
	Leg pain	1

Table 3: Response of relatives regarding covert medications

Questions	Yes	No
Did you give covert medications to your patient?	41	59
In what did you give covert medications?	Food 20	Drinks 21
Duration for which gave covert medications in months	1	12
	2	15
	3	6
	4	5
	5	3
Need for giving covert medications	Aggressive	27
	Wandering	9
	Sleep Disturbances	3
	Self-harm	2
Effect of covert medications on patient (Overlapping Data)	Beneficial	31
	Insight	22
	Manageable	30
	Reduce admission	32

Table 4: Patient's reaction after they came to know of covert medications

Patient's reaction	Number of patients (overlapping data)
Anger	6
Outside food	6
Starve	5
Hitting family member	3
Self-cooking	3
Vomit	2
Food Served by self	2
Threw food	2
Watch over family member	1
Eating from relative's plate	1
Ask relatives to eat first	1

100 patients and 100 caregivers were interviewed. Table 1 describes various demographic aspects of study population, and the two groups are comparable on various demographic profile. Mean duration of psychiatric illness was 11.50 ± 8.20 years (2-40 years). As per DSM 5, 56% of the sample had schizophrenia and related disorders, 36% had mood disorders and 8% had substance use disorders. 75% of patient's had a family history of psychiatric illness. Relationship of caregivers with patient was as follows viz. 25 were parents, 34 were spouse, 16 were siblings, 14 children and 11 others. Tables 2 and 3 describe responses given by patient and caregivers respectively regarding questions asked on covert medications. Table 4 describes reaction of patients when they came to know that they were given covert medications.

Majority of them (98%) had lost trust on their family members after they found out that they were giving covert medications. Before giving covert medications, caregivers tried various other modes of treatment as follows viz. 10% showed to faith healers, 8% gave depot injectables, 7% beat the patient, 6% resorted to physical restraint by tying the patient and 4% locked the patient, 3% had forcefully admitted patient to a rehabilitation center.

Discussion

About 41% of patients had given covert medicines as per relatives but only 32% were came to know about it by taste (22%) smell (9%) and vomiting (6%). Researchers had shown that crushing tablet made medicine unpalatable, some cause mucosal irritation, while some has local anesthetic effect like sertraline [7]. Aggression (27%), wandering behavior (9%), self-harming behavior (2%) and sleep disturbances (3%) in patients made family member to consider for covert medications. A study conducted in attempt to investigate prevalence of covert medication among patients, they found that 43-71% patients in nursing homes and 15-17% institutionalized patient had been given covert medicines [8].

In a survey conducted in 21 psychiatrists, in which 38% confessed that they had given covert prescribing at some point. this low figure of true practice might be result of fear and discomfort about admitting the practice among respondents [9].

In an Indian study done in 67 non complaint schizophrenia patients in which under the guidance of psychiatrist, family member mixed medicine in food of patients without their knowledge, 91% of which shown significant improvement in behavior, 15% had side effect like extra pyramidal reaction and drowsiness, 26% during treatment course realized that they being given medication surreptitiously but till then they acquired enough insight about the illness , benefit of medications as they experienced subjective improvement in symptoms [10]. One study done in light of patient's refusal of antipsychotic medications (1990), reason for refusal in 63 patients, out of which, 35% had history of drug related side effect, 21% had no insight to the illness, 12% had no benefit from medication and 30% had responses that overtly reflect idiosyncratic thought process [11].

In our study, 98% patient had lost trust over family member after they were aware about disguised medicine in food by relatives; this finding is in line with argument given in one study that practice of disguising medicine, if patient discovers it, will lead to distrust and reinforcement of paranoia against family member which could be often long lasting and could affect treatment in longer run [1].

In our study anger, stopped eating home-made food, vomiting out eaten food, physical assault over family member, starving self, keeping constant watch over family member while cooking and serving their food, which indicate developed or worsening patient's distrust toward family member (98%) because of practice of disguising medicines.

Families sought initially nonmedical methods to manage patient's disruptive behavior of which majority went to faith healer (10%), tying patient (6%) by rope, locking patient in room (4%) to prevent them from wandering away; using physical force like beating patient (7%), some educated families were forcibly admitting patient in psychiatric hospital and rehabilitation center (3%) and before taking discharge from hospital forcing patient to take long acting depot formulation(8%) of antipsychotic medicine before considering covert medicines. Relatives tried Covert medicines in all types of food (20%) and beverages (21%) to control uncooperative and violent patients; but succeeded for only short duration period from 1 month to maximum 5 months. After which patients came to know that they had been on covert medicines by drug's immediate effects like its taste, smell, vomit or sedation or long-term effect like sedation, restlessness caused by drug use.

A survey conducted in 2002, in 254 Indian families of patients with schizophrenia regarding the use of covert antipsychotic medication in response to treatment refusal by the patient. Out of 148 relatives who responded, half reported giving medicines to patients without their knowledge. Usually, covert medication was continued for only a few days, but in 14% the covert treatment lasted for more than a year, patients later found out about disguised medicine in food in a quarter of cases. and shown resentment toward the family members who gave the medicines. However, most of the patients took them openly and voluntarily [10].

In our study, according to relatives, patient did get benefit from covert medicines in form of 30% were manageable at home, 32% reduction of need to get hospitalized patient and 22% had developed insight during treatment course and came on their own to seek treatment in hospital.

Most of time crushing tablets, breaking the capsule are outside of marketing authorisation.as per American society for parenteral and enteral guideline, drugs shouldn't be mixed for administration because of possibility of physical and chemical incompatibility [12]. Valproate is an irritant for gastric mucosal lining and can lead to nausea, vomiting, therefore tablet shouldn't be crushed [13].

Those who didn't get benefited the explanation to this may be that of extended-release formulation if crushed leads to variable drug level in blood, which bound to cause drug toxicity in early hours and decreased effect in late hours of administration, which could cause loss of control over patients' illness [14]. Multiple drug powders when mixed with less amount of water will result in hyperosmolar solution which could lead to nausea, bloating, cramping and diarrhea [13]. Another drawback is that patients who do not consume whole dose mixed in food might fail to achieve optimum drug concentration in blood thereby decreasing effectiveness of medication which in turn have poor control of patient's illness. Putting medicines in hot food/beverages or mixing multiple drugs at same time could have change in drug pharmacodynamics which might leads to ineffectiveness or increase adverse effect of medication [15].

In our study, about 96% of patients did not show support to covert administration of medicines; however, all relative samples supporting covert administration of medicines in patients during acute psychiatric crisis. One study threw light on cultural variation between eastern and western societies, where in eastern families, patient with mental illness almost always brought by families, they are legally responsible for patient because their illness affects the family unit in which they live [16].

Conclusions

Our study emphasizes the need to have some legal guidelines regarding covert medications in psychiatric treatment. It has been brought out that majority if patients who had received covert medications had benefitted by it and caregivers were forced to use this method after other efforts had failed. Also, maximum duration of giving covert medicines is less due to various reasons and there is need to make formulations for many psychotropic medications which are colourless, tasteless and stable in hot and cold beverages/ food and not interacting with food. The study was carried out in small sample in a tertiary hospital and findings cannot be generalized and responses in interview may be affected by literacy of sample.

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