

Chapter 6

Multiple Medication Use of Neuropsychiatry in Forensic Psychiatry: Findings from the Central State Forensic Psychiatric Hospital of Saxony-Anhalt

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Abstract Neuropsychiatric treatment schemes differ considerably in forensic psychiatry compared to daily use in general psychiatric treatment facilities. On one hand, average treatment time usually is dramatically higher and on the other hand, patients dealt with are in danger to recommit serious crimes, if not treated adequately. Hereby, the use of neuropsychiatric polypharmacy might lead to more serious problems in forensic psychiatry, as the impact on risk reduction cannot be easily surveyed. This however, will be a necessary prerequisite of an adequate and as well safe treatment, if we wish to be successful in establishing ensured standards of treatment which will enable us to guarantee a sufficient risk prevention for general society. However, the benefits of the use of multiple medication schemes in terms of neuropsychiatry can be achieved by a very special control of patients and an obligatory ambulant aftercare, when treatment in detention facilities is accomplished.

Keywords Polypharmacy • Forensic psychiatric treatment • Neuroleptics

6.1 Introduction

The most important task of forensic psychiatry concerns the evaluation and treatment of patients whose psychiatric abnormalities have resulted in crimes. Among those who have been committed to forensic psychiatric facilities, we usually find persons suffering from various serious mental illnesses, such as especially schizophrenia. Although not held criminally responsible by the legal system due to their psychiatric status, such individuals often are typically placed in specialized facilities which

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will enable us to protect general society from the commitment of further crimes as long as the treatment will not be accomplished.

Thus, this aspect of forensic psychiatry can be conceived as a combination of custodial attention, referring to the function of separating dangerous mentally ill individuals from society, as well as an intensive therapeutic care and support to achieve best conditions ever before finally discharging the patient from the hospital as soon as possible—when they finally are judged to no longer pose a significant risk of recommitting future crimes.

The psychiatric abnormalities usually are diagnosed by performing a comprehensive psychiatric evaluation in the course of a criminal prosecution. When this evaluation leads to the conclusion that the person was not fully responsible due to a serious mental disease, he or she will receive treatment to enable resocialization and, eventually, a more or less normal life after discharge.

Clearly then the task of risk assessment is a central question in forensic psychiatry, requiring professional and continuous re-evaluation. At each stage of treatment the question must be answered to what extent risk reduction had been achieved by the therapeutical processes applied. However, the methods used to answer this question are mainly based on psychosocial and subjective criteria only. There is a great need to develop forensic evaluation techniques that are more informed by biological and objective criteria, including the benefits which are connected with medication treatment schemes [1].

Forensic Psychiatry reveals increasing patient numbers throughout previous years and thus is generating a problem, how to deal with a huge number of patients treated there in a way to shorten their average treatment time—without risking increasing redeliquent behavior.

In order to achieve this goal, besides many others, neuropsychiatric treatment strategies are employed very often using multiple medication schemes. So the question is to be answered which schemes might be most successful in fulfilling this task adequately.

In the past we faced in the field of neuroleptics the use of monotherapy referring mostly to the use of conventional neuroleptic substances (FGAs). Indeed, side effects would be found in such patients at least as often as could be seen in those of general psychiatry. Striving for essential risk reduction might have emphasized the wish to neglect such effects. In the light of modern therapy strategies, however, the limitations of such therapy regimens will be looked upon more and more as less convincing and should be left, when ever this might be possible.

As well, the use of depot neuroleptics seemed to be the best way to ensure medical compliance. Indeed, this might be helpful in the large field of medication strategies applied. However, it usually neglects the fact, that best medical compliance as well as risk reduction will be achieved by installing an adequate and professionally driven ambulant aftercare facility for those patients who will be discharged from forensic psychiatry [2]. Under those conditions, the number of strategies in the field of neuropsychiatric treatment can be enriched and will be more precise and working more successfully.

In the past very often conventional treatment strategies were employed, most due to the fact that psychiatrists feared the outcome of poor medical compliance [3, 4]. This is to say, that unreliable administration of medication—for what reason ever—could cause further serious delinquency performed by forensic psychiatric patients in the course of treatment and especially after discharge of such persons.

6.2 Multiple Medication Use

There are few studies having been performed dealing with the results of different therapy schemes in forensic psychiatry, yet. So we assume that the results achieved in daily practice of one of the largest forensic psychiatric hospitals of Germany might shed some light onto this issue.

The Central State Forensic Psychiatric Hospital of Saxony-Anhalt at Stendal is a specialized hospital in Germany offering therapy to 300 patients in the field of forensic psychiatry. It deals with individuals who committed all kinds of crimes, e.g. murder, serious bodily harm, and sexual offences. Besides, all diagnostic groups known from general psychiatry can be found there. The most important groups of diagnoses are represented by schizophrenia and personality disorder.

We proposed the hypothesis that in the course of analogous treatment schemes regarding general psychiatry patients in forensic psychiatric facilities should benefit from such widely established therapy regimens as well.

Of course, we know today that in many cases it will not meet the gold standard of neuropsychiatric treatment, if we will avoid a medication using a combination of various neuroleptic substances. However, we face the difficulties, that such therapeutic standards cannot be administered as depot medication alone. So we will have to leave conventional therapeutic strategies, if we will allow the use of modern regimens.

In the past we feared to give way to further delinquent behavior of forensic psychiatric patients using medication schemes not consisting of depot formulations alone. This is due to the estimation that we hoped to ensure the administration of neuroleptic substances by prescribing predominantly depot neuroleptics resulting in constant plasma levels of the substance administered. There is no doubt, that we will usually face a higher risk of poor medical compliance using oral substances, as in this case we usually will be dependent on cooperative behavior of our patients who hopefully will reliably swallow the prescribed medication.

Thus, we face a dilemma which consists of the need to establish modern therapy schemes introducing the use of multiple predominantly orally administered substances on one hand—and the risk of redelinquent behavior eventually resulting in serious crimes which might be related to the use of such strategies due to poor medical compliance. It might be assumed as an unsolvable problem, thus telling us that it would be better to use conventional depot medication and neglect the benefits of modern multiple medication use in the field of forensic psychiatry rather than to risk further crimes committed by mentally ill patients.

Indeed, if we just think twice, we will realize that continuous medication even in the case of applying depot formulations can be assured to a sufficient extent only, if we will be able to control it regularly. After patients having been discharged from forensic psychiatric facilities, however, it will be the task of aftercare units to ensure this. So the dilemma referred to before usually can be avoided by introducing a professional aftercare which will control patients and the way they cooperatively use the prescribed medications. In this case, it is no longer a decisive aspect of such treatment, if medication was administered by depot or oral medication schemes. Meanwhile, we have gold standards of controlling such persons by analyzing plasma regarding the levels of previously prescribed medication.

All in all, we may conclude that even in the case of forensic psychiatric patients the use of multiple substances which are administered orally should be at least as effective as conventional treatment schemes. Especially by avoiding side effects such as neurologic symptoms of neuroleptic therapy, we could enhance the cooperative ability of individuals when having been discharged from forensic psychiatric facilities. Moreover, it seems more likely that modern therapy schemes might be more promising regarding medical compliance, when the period of forensic psychiatric aftercare will come to an end. During this time discharged patients will not be obliged anymore to take any drug prescribed. So we will be dependent on professional psychoeducational schemes applied before, which will enable the patients to understand, how important was the use of the prescribed medication. It is probable that this might be more successful in case of using modern neuroleptics which cause much less side effects than conventional ones.

Especially the use of polypharmacy will need such professional aftercare to control side effects [5, 6]. Using various substances the risk to introduce side effects such as e.g. extrapyramidal effects on motor control, sexual dysfunction, tardive dyskinesia, weight gain, and gynecomastia is increased. The occurrence of such side effect unfortunately will lead to poor medical compliance. So the aftercare units of forensic psychiatry should not deal only with the problem to avoid further commitment of crimes by judging the mere risk in any individual. The way to successful risk reduction in contrast should start at a much earlier stage in controlling negative effects on medical compliance.

Successfully applied polypharmacy will enable doctors to prescribe substances which will not cause dramatic side effects—and thus supporting the patient's ability to maintain the prescribed medication. For this reason, it might be necessary to judge the risk of introducing side effects before medication will be prescribed. As well, there should be an opportunity to change, if those side effects will occur in the course of the treatment. If we will not neglect such positive aspects of modern neuroleptic treatment regimens, it will be possible to use polypharmacy to reduce risk of discharged patients of forensic psychiatry by supporting their compliance. We know for sure, that many patients having been discharged from forensic psychiatry will recommit crimes due to their inability to show continuously cooperative behaviour. So we should try to support the ability to cooperate by using modern medication schemes and by avoiding side effect where ever possible.

At the same time and in the same way, this will be proceeded, it will be possible to control medical compliance by tests. Thus, there will be no negative effects on

medical compliance by prescribing modern neuroleptic substances—or combinations of orally administered substances [7].

6.3 Epidemiologic Aspects

The percentage of schizophrenic patients in forensic psychiatry has been steadily increasing during the past years and reaches now more than 50% of patients sent to our hospital by the court at present.

Most of these patients are treated due to very serious crimes committed such as murder, serious bodily harm, sexual offences, and arson. As well, multimorbidity of such patients is astonishingly high reaching more than 70%. Especially, they are suffering from additional drug addiction which will make medical treatment even more complex.

Average treatment time increased during previous years and reached meanwhile about 7 years, thus reflecting difficulties in performing risk reduction [8].

As insufficient treatment of such individuals will result in the commitment of further serious crimes, we are due to establish treatment schemes to ensure reliable risk reduction to protect general society from this [9]. This includes modern medical strategies referring to polypharmacy, if needed, to enhance the prognosis of patients.

6.4 Combinations

In our hospital we found that the use of second-generation-antipsychotics (SGAs) was a common treatment strategy. These substances were often administered as oral medication (Fig. 6.1).

When those substances were combined, we usually found the combination of risperidone and quetiapine the most common one (Fig. 6.2). Thus, we were able to avoid serious side effects, such as extrapyramidal-motoric side effects or even tardive dyskinesia [10–13].

The impact of neuroleptic treatment, however, can be supported by using mood stabilizers as valproinate or carbamazepine in order to reduce aggression or impulsivity of forensic psychiatric patients, mostly used in combination with SGAs [4, 14].

6.5 Conclusions and Future Directions

There is evidence to be found that a high percentage of patients treated in general psychiatry will receive a combination therapy. In scientific articles there are various percentages indicated ranging from 20 to 50% [15–17]. Besides, we face an increasing use of combinations regarding antipsychotics and antidepressants or mood stabilizer [18].

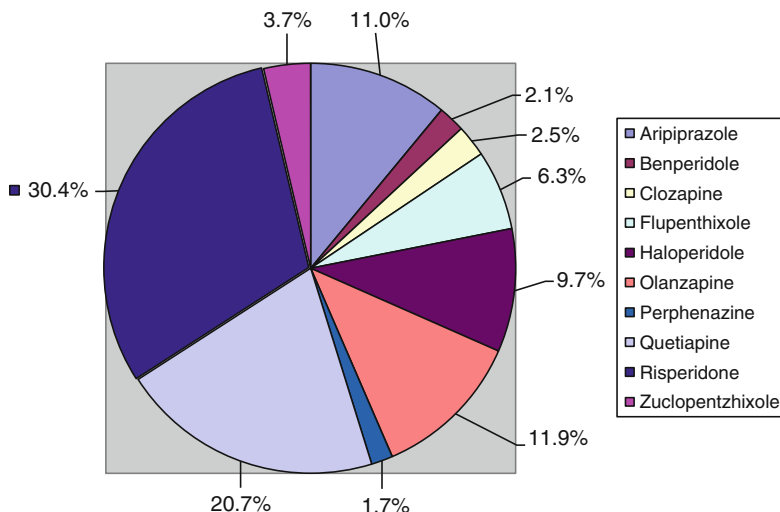


Fig. 6.1 Polypharmaceutic prescriptions of neuroleptic substances (N=599) in the Central State Forensic Psychiatric Hospital of Saxony-Anhalt, Stendal, Germany in 2005–2007

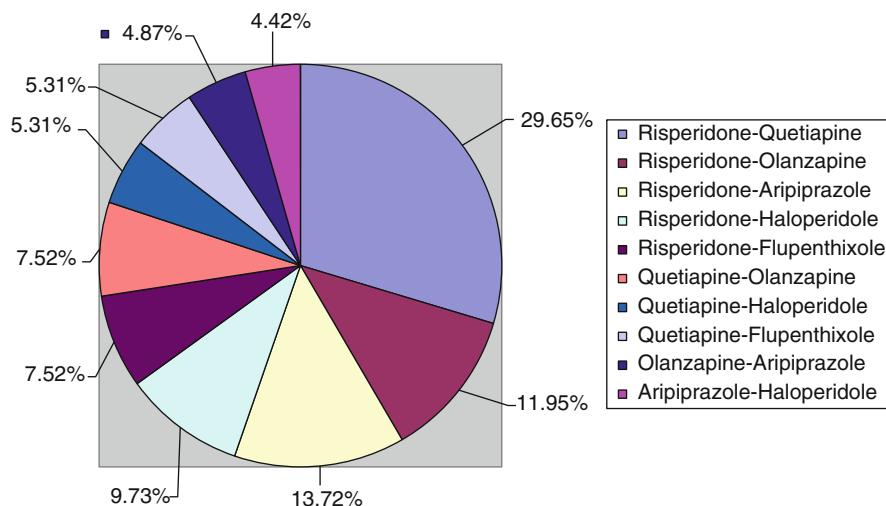


Fig. 6.2 Percentage of combinations regarding polypharmaceutic prescriptions of neuroleptic substances (N=303) in the Central State Forensic Psychiatric Hospital of Saxony-Anhalt, Stendal, Germany in 2005–2007

In our hospital we found 20% out of the group of patients treated by antipsychotics to receive a combination therapy. These results are paralleled by the findings of Megna who reported 22.2% of patients to be administered a combination therapy in general psychiatry [7].

The use of neuroleptic substances now is extended to various diseases besides antipsychotic treatment and opens the door for highly interesting new medical therapy strategies which might be very promising in the field of forensic psychiatry as well [19–25]. Using such combination therapies in the field of neuroleptic treatment, we should be aware of the fact that it need to be of reliable benefit for the patients [26–29].

Finally, we should take into consideration that the process of resocialisation of forensic psychiatric patients is a most challenging task for the patients who were treated for many years, thus being detented in facilities which often did not allow them to cope with the needs of daily life. They will need to learn, how to come back to society and how to restore a common daily life. It is easy to understand that they will face numerous stereotypes—and every single redelinquency of any patient will enhance this process for all of them. We may conclude from this that patients will need medication schemes which will support their cognitive abilities and will not introduce negative symptoms as this will exclude them from society and will impair or even make resocialisation process nearly impossible [30].

Besides advanced therapeutic strategies in the field of psychopharmacotherapy, we will be due to install a system using modern diagnostic methods [31] to enable our patients to profit as much as possible from the treatment in forensic psychiatry for the sake of general society as only applying best treatment strategies can protect us from the commitment of further crimes after patients have been discharged.

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