

## Therapeutic Trial for Workers with Mental Disorders at the Workshop

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### INTRODUCTION

The difficulties in industrial or occupational psychiatry were already reported<sup>1)</sup>. Simply, the standpoint of companies, giving top priority to efficiency and security of safety, clash with that of the psychiatrists.

In order to have a mental health clinic established firmly in a company, we have put various ideas into practice. In the present paper, we shall report on a therapeutic trial workers who no longer suffer symptoms of the acute stage, and who can engage in labor while on psychotropic drugs.

### MATERIAL AND METHOD

In selecting ten schizophrenics from among 33 patients who are currently under treatment at a mental health clinic of a factory employing about 3,200 workers, we had them take one suitable drug chosen from many psychotropic drugs once a day, had them work, with a once-a-week drug holiday provided, and made observations on the effectiveness of the drug. Common psychiatric symptoms presently observable with these patients are a decline of initiative and apathy.

One of these three psychotropic drugs, perphenazine, pimozide and clocapramine, was used. The job category and the number of patients assigned are: greenery work in the factory, with 4 patients assigned; simple work of putting things in order, with 4; and work supplemental to danger-free field work, with 2.

The working hours were fixed at 8 hours a day, 40 hours a week. We asked each of their superior to check up on their daily attendance (absence-without-notice, late-coming, early leaving), work efficiency and personal relations with their colleagues.

Observations were made for six months, during which psychiatric evaluation using a psychiatric symptom-assessing scale in five grades,

and a checkup on the physical conditions (heart, blood pressure, urinalysis) were made by a psychiatrist once every two weeks, and the situation at home, and how the drug was taken were reported on by their families once a month.

## RESULTS

It was made known that nine-out-of-ten patients were taking the drug faithfully as directed. Regarding the way of administration, the patients were instructed to take 4mg of perphenazine, 2mg of pimozide and 50mg of clozapramine, after breakfast, every day.

Two-out-of-four patients on perphenazine started complaining of sleeplessness in the second week and fourth week after initiation of the drug administration, so the time for medication was changed to after supper.

Furthermore, one case complained of difficulty in concentrating, so the daily dose was increased by 5mg of perphenazine.

In one-out-of-three cases in the pimozide-administered group, the daily dose was increased by 3mg in the fourth week because of persistent abulia. In one-out-of-three cases in the clozapramine-administered group, the daily dose was decreased by 30mg in the fourth week because of complaints of palpitation.

Side-effects, such as extrapyramidal akathisia, hepatic insufficiency and agranulocytopenia, were not observed.

Sinus tachycardia was observed in one case of the clozapramine-administered group, but this symptom disappeared two weeks after the dose and the amount of work, were decreased.

According to the evaluations by their superior at the workshop six months later, the work performance was rated as excellent for 4, as average for 4, as slightly inferior for 2 and inferior for 2. Those rated as slightly inferior were lacking in work efficiency and the power of concentration.

Those rated as inferior, reportedly showed odd patterns of behavior derived from psychiatric symptoms, such as a forced smile, a monologue and a stereotyped attitude, in addition to a defiant attitude toward his superior, lack in cooperation with colleagues, and absence without notice.

From the psychiatric viewpoint, there were 5 that were markedly improved, 3 that improved and 3 that were unchanged cases in the aspect of volition and emotion. None of the cases showed signs of aggravation.

According to evaluations by family members, 2 cases were rated as good, positively, and one case showed occasional problematic behavior.

## DISCUSSION

According to an investigation on how drugs are taken by outpatients of the department of psychiatry, more than two-thirds of them do not take drugs as directed by their physicians (Rickels et al. 1970<sup>2)</sup>). It was also made known by studies by Park et al. (1964)<sup>3)</sup>, that 51 percent of the patients showed drug deviation.

As one measure to cope with the situation, the once-a-day administration is recommended (Blackwell, 1973<sup>4)</sup>). That is, prescribe as few kinds of drugs as possible, reduce the number of divided portions for a daily dose, have family members or friends take part in the supervision on the regular follow-up and medication, and fully explain to the patient the possible results if they neglect taking the drug — these are considered to be good methods.

To patients who had received drug administration two, or three, times a day, one kind of neurotropic drug was administered once a day and observations were made on how it was taken and the influence it exerted on the symptoms.

As to how the drug was taken, results were very good, and only one case showed drug deviation. For this case, we have taken up a method by which his superior takes charge of the drug and has him take the drug after lunch, and it is producing satisfactory results.

Schizophrenics are generally sensitive or have a low tolerance to uncomfortable side-effects which are considered trifle, compared to the benefit which could be derived from their following therapy as directed.

Regarding the propriety of the once-a-week drug holiday, and the kind and dosage of the drug we used, there is undoubtedly a need for rigorous checkups, including a blood level measurement of the drug. In the case of once-a-day administration of neurotropic drugs, should side-effects appear, it would be relatively easy to elucidate the cause-effect relationship between the drug taken, and the side-effects.

That the mental burden of patients to take the drug as instructed has been diminished, is, of help in preventing drug deviation. However, medication should by no means be forgotten in case where the dosage of the drug is minimal. If the drug is not taken, the symptoms are likely to recur, and it was confirmed that a full explanation of these things, obtaining the understanding of the patient himself, and his family, led to

therapeutic success.

It should also not be forgotten that the group of patients selected as subjects were composed of only patients free of positive symptoms of schizophrenia.

It should also be pointed out, parenthetically, that patients of this group were all living with their families. In cases where a patient lives in a dormitory, or where his close relatives are not living with the patient, drug deviation is often found, and the success rate is low in making patients work while placing them on a psychotropic drug, about which we already reported. (Yamada et al.<sup>1)</sup>).

Here, however, we must mention that, in having a worker with schizophrenia resume work, the management side would not approve of it unless he took a neurotropic drug, and that this trial was not easily carried out at first, because of the possible danger at work arising from the administration of the said drug.

As a result of this six month trial, however, it was recognized by the psychiatrists, and the management, that the workshop could be a place for occupational therapy. Furthermore, it should be noted that the patients' observance of the instructions of their physicians, families, superiors and colleagues made for a tendency for them to observe rules in the society in the psychiatric symptoms evaluation scale.

Improvement in the aspects of volition, emotions and personal relations was observed, but little improvement was found in the psychiatric symptoms.

After this trial, it was decided that two patients receive only medical examinations, without the administration of neurotropic drugs, at the mental health clinic and that observations be made on the clinical course. The remaining patients stayed on the same therapy as before.

After this trial, it was proposed that workers with mental disorder be put together in a group, and assigned to specific work. For instance, greenery work and cleaning work.

However, their being included in this group, holds the danger of being discriminated against by their colleagues, so this plan has not as yet been put to practice.

In order for the psychiatric function to be brought into full play in a company, the understanding of the company itself, the cooperation of the patient's family, and hope for the future from the patient himself, are as important as the efforts of the psychiatrists. If any one of these is missing, success would be difficult.

## SUMMARY

Either perphenazine, pimozide or clocapramine was administered once a day to 10 workers with schizophrenia in whom acute symptoms had disappeared.

The patients engaged in greenery work, simple work of putting things in order, or supplementary field work in the factory compound, eight hours a day, 40 hours a week.

Observations on the work performance, conditions of home life and changes in psychiatric symptoms were made by their superiors, families, and psychiatrists for six months.

The drug was taken regularly in nine-out-of-ten persons, there being 5 markedly improved, 3 improved and unchanged cases in psychiatric symptoms. For instance, in the aspect of volition and emotion.

Side-effects and disturbances worth mentioning were not observed.

It has been stressed that understanding and cooperation of the company, colleagues and families are as important as the efforts of the psychiatrists for the treatment of persons with mental disorders in the company.

## REFERENCES

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