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Sleep Deprivation Therapy : A Part of an Integrated Plan in a Special Milieu

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ABSTRACT

In milieu therapy the inclusive spirit with a goal oriented philosophy gives a new taste and meaning for all physical handling of psychiatric patients exposed to such milieu. The relation of the variation of REM sleep in relation to psychosis and psychoactive drugs was correlated to the rationale of sleep deprivation therapy. Illustrative cases of different diagnoses were provided. They comprised one obsessive compulsive neurosis, one anorexia nervosa, and four schizophrenic cases. Sleep deprivation was never introduced until a solid therapeutic relationship had been established. It followed a marathon group therapy in four cases and was limited to one to three days. It was immediately followed by rehabilitation and continuation of the intensive therapy. Results were favourable in general, particularly if related to the specific intermediate goal. However, the overall progress could never be related to a part technique but rather to the whole plan.

INTRODUCTION

The dichotomy between physical therapy and psychological therapy is fading away. This goes parallel with the disappearance of the artificial demarcation between organic and psychological pathogenesis. In a therapeutic milieu the spirit with a goal oriented philosophy gives a new taste and meaning for almost all therapeutic methods applied to psychiatric patients exposed to such milieu. We can say that in this special milieu therapy is a gestalt process where the active ingredients

of therapy with the milieu make a whole that is different from simply adding the effects of different therapeutic modalities.

Recently, sleep deprivation (total and partial) therapy has been adopted by a number of psychiatrists and has been tried in "depression" with preliminary good responses specially in the psychotic type (Pflug and Tolle, 1971; Kretschmar and Peters, 1973; Vogel **et al.**, 1973; Bhanji and Roy, 1975; Knowles **et al.** 1979) but with late doubted value. Christodoulou **et al.** (1978)also investigated the possibility of a prophylactic effect of sleep deprivation in cases of endogenous depression.

However the mechanism of action of sleep deprivation therapy is not known, but the relation of the variation of REM sleep in relation to psychosis and psychoactive drugs may be correlated with the rationale of this type of therapy. Knowles **et al. (1979)** did not support Vogel's et **al.** (1977) argument of the association of improvement with increased REM pressure. They suggested that sleep deprivation merely permits the continuation of beneficial processes initiated during wakefulness and denied its relation to REM or Non REM sleep. Rakhawy (1980) presented three explanations to the beneficial effects of sleep deprivation. First, it represents a threat for the emergence of the internal activity in the form of psychosis; this urges the more recent external activity to increase its control over the internal one, with the resultant disappearance of symptoms. Second, the rebound increase in Rapid Eye Movements sleep, which occurs after periods of sleep deprivation, acts as a safety valve for release of the internal activity through dreams instead of its release in waking life, as psychosis. Thirdly, sleep deprivation, in some cases as personality disorders, shakes a pathological compromise, a step needed for subsequent steps in the psychotherapeutic process.

The swinging results and relatively short effect of this procedure may be related to the lack of a consistent therapeutic plan and/or the

lack of a relatively solid theoretical background. **The aim** of the present work is to show that sleep deprivation, like any other measure, should be selectively indicated not for this or that diagnosis but for a particular case in a particular phase to achieve a predetermined intermediate goal to be followed by this or that step accordingly.

MATERIAL AND METHOD

The prerequisites for including our cases in sleep deprivation were :

(1) The consent of the patient and/or nearest responsible relative for the general plan of treatment with the possibility of resorting to sleep deprivation.

(2) The refractoriness to other therapeutic measures.
(3) The establishment of a solid therapeutic relationship.

Illustrative cases are five males and one female and the age ranges from 18 to 26 years. The diagnoses were : one with obsessive compulsive symptoms as a residue of schizophrenic process, another case of anorexia nervosa and four schizophrenic cases. They were inpatients in a hospital where a genuine trial has been made to construct a relatively therapeutic milieu with underlying consistent and goal seeking idea.

We worked with each case independently except in the last two cases who were handled together. The period of study started on September 1975 and follow up will be mentioned with each case separately. Sleep deprivation followed a marathon group therapy in four cases and was limited to 24 to 72 hours of total sleep deprivation. The subjects were kept awake by studying, discussion with the therapist, running, bathing and work treatment during day time. The main therapist and/or his cotherapist participated in the deprivation procedure and this reinforced the relation and facilitated further management.

CASE ILLUSTRATIONS

CASE 1 : A twenty - year - old male patient who was suffering from active incipient schizophrenia for three years which blocked his superior scholastic achievement. All other previously applied outpatient and inpatient measures of help had failed before starting the prolonged plan. The intermediate step of twenty four hours sleep deprivation followed immediately a genuine suicide trial that declared impending qualitative change. After the deprivation experience he resumed rather dramatically his ability to achieve in studying with better qualitative difference in a stable way. In this case sleep deprivation helped to consolidate the gains of the whole plan, and since then and for the last six years symptoms have never recurred and he passed all his exams.

CASE 2 : A nineteen - year - old male patient with obsessive compulsive symptoms as a residue of a schizophrenic process, associated with lack of volition. Sleep deprivation for 72 hours was applied to enhance the break down of the obsessive defences which were already cracking under the effect of drug therapy, work treatment and group psychotherapy. Mild disorganization and confusion occured during sleep deprivation but was taken as a good sign as the patient was sufficiently prepared to turn the break down into a break through. However, the qualitative changes that followed uncovered the pathological relation with his mother who persuaded him indirectly to discontinue the treatment.

CASE 3 : A twenty - year - old female suffering from anorexia nervosa of two years duration. Following a combined regime of drug and group psychotherapy, she started to eat regularly and sufficiently but hypersomnia appeared which meant that the patient probably was replacing one pathological mechanism by another. Thus it seemed that she was una-

ble to integrate the insight gained into the meaning of her vomiting and anorexia. This constituted the essential background for trial of sleep deprivation with the aim of breaking the new mechanism and integrating the experience of change. Sleep deprivation was carried on for 72 hours. Subsequently she became able to integrate the experience of change and to maintain improvement. This improvement was sustained for one year but the patient gradually declined once more owing to the severe interpersonal psychopathology between her parents.

CASE 4 : A 19 - year - old male diagnosed as pseudopsychopathic schizophrenia. In the milieu and after three months of a lengthy plan consisting of phenothiazines, group psychotherapy and work treatment, little improvement was noticed. When the patient was left to himself and with every new day there seemed to be a complete relapse and a restart was needed. That is why the plan was carried to an extreme and sleep deprivation was started in search for a qualitative change rather than temporary obedience. In this case sleep deprivation for 24 hours was followed a week later by 60 hours sleep deprivation. The whole plan was satisfactory and the psychopathic behaviour disapeared for a year and half after discharge although scholastic block was not resolved with the same pace.

CASE 5 : A twenty - six - year - old male who was withdrawn in his room for the last four years. The diagnosis was paranoid schizophrenia. He was very resistant to participate in the milieu. After a marathon he continued sleep deprivation for twenty four hours with minimal sleeping hours for the next week. He was discharged in a short time than predetermined and joined an outpatient group psychotherapy. He resumed his studies successfully.

CASE 6 : An 18 - year - old male who was suffering from a recently developed subacute schizophrenic episode. He participated in the same marathon with the previously mentioned case and the response was enhanced by continuing sleep deprivation with the same case. Immediately after he developed catatonic symptoms which was cleared dramatically with one ECT after which he was discharged within a week with a favourable outcome. The qualitative changes that followed were superior to the premorbid state. He attended outpatient group therapy for one year and was doing as well.

DISCUSSION

I. Aim of Sleep Deprivation :

In the provided illustrations, the main aims of sleep deprivation therapy were the following :

(A) First, to exhaust certain defences in order to traverse a particular impasse. This is particularly evident in Case 2. In this case the presence of obsessive compulsive symptoms acted as a defence against frank psychosis and in the same time the defence was rigid enough to act as a strong barrier preventing full effectivenss of therapeutic measures. Sleep deprivation made these defences yield to the extent that mild disorganization and confusion appeared. The patient was well prepared so as to turn this break down into a break through.

(B) Second, it was resorted to sleep deprivation to integrate a specific experience. This is clearly evident in Cases 1 and 4. In the former, it helped to integrate the impending qualitative change which was a result of the therapeutic measures taken before the step of deprivation. After this type of integration, the patient never came back to his pre-deprivation condition. In Case 4 it paved the way for the continuation of beneficial processes to which the patient was exposed in the milieu. Accumulation of these effects had led

finally to the desired qualitative change as well as its consolidation.

(C) Thirdly, the procedure of sleep deprivation was taken to reinforce awareness into a particular psychopathology. This had occured to a greater or lesser extent in all the cases. It was achieved through the psychotherapeutic sessions and discussions held during the hours of deprivation.

II. Timing of Sleep Deprivation and Duration (Dose) :

Judging the appropriate time of therapeutic interference by sleep deprivation was a crucial factor in the therapy. First of all, establishment of a relatively solid therapist-patient relationship was essential before starting deprivation. This type of relationship, in our opinion, may make the whole difference between successful and unsuccessful therapy. It helps the patient to be ready to perceive the many therapeutic ingredients which happen during the hours of deprivation. It also minimises the risks of such major therapeutic procedure, such as uncontrollable psychotic impulses, other frank psychotic features and suicide atempts. In other words, break down in the context of a therapeutic relation turns into a break through.

Secondly, signs of impending qualitative change as a result of the other therapeutic measures were ensured before starting the deprivation. For example, in the first case the genuine suicide trial was taken as declaring impending qualitative change. In the third case hypersomnia was interpreted as a sign indicating effectiveness of therapy. However, it must be said that it was difficult to achieve the goal of the therapeutic plan without resorting to sleep deprivation. In other words, refractoriness to the other measures, taken before deprivation, to achieve the desired improvement was manifest.

As regards the length of sleep deprivation, it was adjusted to individual cases according to the intermediate goal. For example, in the first case 24 hours of deprivation were sufficient, while in the second case

we needed as long as 72 hours. In the fourth case 24 hours of sleep deprivation were followed a week later by another 60 hours.

III. Sleep Deprivation as a Part of a Plan

In the present work, sleep deprivation cannot be taken as an isolated therapeutic measure unrelated to the before and the after ones. On the contrary, it was planned from the start to be a merely intermediate step to achieve a certain goal at a particular stage in the whole plan of the therapeutic process. This is clearly evident in all the presented illustrations.

Physical and psychopharmacological measures, as well as group psychotherapeutic sessions (including marathon) and various therapeutic group activites (e.g. work treatment) preceded the step of sleep deprivation according to each individual plan of therapy. All these measures prepared the patients for the major step of sleep deprivation.

Also as important are the measures taken after sleep deprivation. In each case (except case 2) the particular plan was taken to its end by the continuation of therapy in the form of psychopharmacotherapy, psychotherapy and ECT when indicated. So the outcome of therapy cannot be attributed to a particular procedure but to the whole plan of therapy.

Lastly, it has to be emphasized that the hours of sleep deprivation were full of active therapeutic measures.

IV. Sleep Deprivation in the Therapeutc Milieu :

The last important point to be commented upon is the type of the hospital milieu to which the patients were exposed, and in which all the sequences of the therapeutic plan had been performed. The theory underlying this milieu conceives man as "pulsating evergrowing organism" and, accordingly, psychiatric disorders "as hazards of human pulsations and growth" (Rakhawy, 1979). Regardless of the etiology, this milieu, according to that theory, fully considers the potentiality

within psychiatric patients to reverse the process of disorganisation through competent understanding into a process of gradual reorganization facilitated by dependency and belonging to the reliable figure of the hospital. When this milieu is taken as a whole, it can be said that it represents a reparatory life model forming a bridge between boaring normal life and bizarre psychotic fantasy.

The last point to be emphasized is that all the activities in the milieu are attended and shared fully by the therapists so that at no stage the patients are left to their own. The observation of the patient's behaviour during various activities enables us to make adjustments in the patient's treatment plan. As it has previously been mentioned, the therapist and/or co-therapist participated in the sleep deprivation procedure and this reinforced the relashionship and facilitated further management.

CONCLUSIONS

To conclude we come to say :

1 – It is impossible to relate any improvement in such prologed "tailor made" plans to a particular step. The relatively favourable results could never be related to sleep deprivation alone. So the latter should not be accepted as an independent therapeutic tool.

2 – Whatever results appeared, whether reactivation of inner pathology or amelioration of clinical symptomatology means nothing unless it is integrated in the following step.

3 – Nothing justifies this technique except refractoriness to almost all other therapeutic measures and a pre-established psychotherapeutic relation.

4 – It is rather fruitless to compare sleep deprivation as an isolated experience with other physical or psychological methods.

5 – Lasltly, we have to confess that unless the psychiatrist is the main

agent using and responsible for whatever psychological, physical or physiological device, nothing could be achieved with the available therapeutic modalities. We have always to remember that psychiatry is a clinical healing art and without the artist whatever basic material is provided no real healing could be achieved.

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الموجـــــــز

العلاج بالحرمان من النوم : كجزء من خطة تكاملية فى وسط خاص

تعطى الروح التى تشمل الوسط العلاجى ، وكذلك الفلسفة المحددة الهدف التى يقوم عليها هذا الوسط ، مذاقا ومعنى لكل انواع العـــلاجات التى تمارس فيـــه ، ولقد ارتبط الأســـــاس الذى قام عليـــه العـــلاج بالحرمان من النوم بالتغيرات التى تحدث فى النوم النقيضى نتيجة لحدوث الذهان وتعاطى الأدوية النفســـية . ويشتمل البحث على عينات توضيحية متضمنة حالة وسواس قهرى ، وحالة فقد شـــهية عصبى ، وأربع حالات فصام ، ولم يبدأ هذا النوع من العلاج الا بعد اقامة علاقة علاجية وطيدة مع المرضى ، واقتصر الحرمان من النوم على فترة تتراوح بين يوم وثلاثة أيام ، ولقد سبقه جلسة علاج نفسى جمعى طويلة (ماراثون) فى أربع حالات ، وتلاه مباشرة اعادة تاهيل واستمرار العلاج المكثف لكل الحالات ، ولقـــد

كانت النتائج حسنة وبخاصة فيما يتعلق بالهدف المحدد له ، وعلى اية حال فان التحسن العمومى لا يمكن ارجاعه الى خطوة علاجية بعينها ولكنه يعزى الى الخطة العلاجية باكملها .

ABSTRAIT

La Privation Thérapeutique du Sommeil :

une Partie d'un Plan intégral

dans un Milieu Particulier

Dans un milieu thérapeutique, l'esprit qui y est inclus ayant un but, avec une orientation philosophique, donne un goût et un sens à toutes les manipulations physiques auxquelles sont exposés les malades mentaux figurant dans ce milieu. La variation du sommeil MRO (mouvements rapides de l'oeil) par rapport à la psychose et aux psychotropes, a été ratachée à l' idée de la privation therapeutique du sommeil. Des sujets de différents diagnostics ont été fournis pour illustrer cette approche thérapeutique. Ceux ci comprennaient une névrose obsessionelle, une anorexie mentale, et quatre sujets schizophréniques. La privation du sommeil n'avait jamais été pratiquée qu'après l'établissement d'une relation thérapeutique solide. La privation du sommeil a été pratiquèe à la suite d'un groupe thérapeutique "marathon" dans quatre sujets, et a été limitée à une période de 1 à3 jours. Elle a été immédiatement suivie par une réhabilitation et par la continuation d'une thérapie intensive. Les résultats ont été généralement favorables, et particulierement quand ils sont évalués par rapport aux buts intermédiaires. Néanmoins, le progrès total ne pouvait être attribué à une partie de la technique, mais plutôt à l'ensemble du plan thérapeutique.