PROGNOSTIC SIGNIFICANCE OF PSYCHOPATHOLOGY IN THE ABSTINENCE FROM OPIATE ADDICTION

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SUMMARY

The aim of the present study was to find out the influence of psychopathology on abstinence from opiate addiction. A group of 34 opiate addicts with psychopathology was compared with another group of 55 opiate addicts without psychopathology. Both the groups were detoxified and followed up for a period of 12 months.

Common psychopathology in opiate addicts consisted of psychopathic personality disorder, manic depressive psychosis, schizophrenia and psychosomatic and neurotic disorders. Abstinence rate was 18.8% in opiate addicts with psychopathology in contrast to 60.8% in addicts without psychopathology. The implications of the findings have been discussed.

The association between opiate addiction and psychopathology has a long history that is now supported by a number of clinical and other research data (Kandel, 1978; Paton et al., 1977; Mirin et al., 1976; Woody and Blaine, 1979; Dole and Nyswander, 1967).

Psychopathology may require more attention today because it is more common now in treated opiate addicts than in the 1960s, when the dramatic upsurge of opiate use took place. McLellan et al. (1979) hold that substance user seeking treatment in the later 1970's generally have more disturbed psychopathological profile than those entering the same treatment faculty ten years earlier. Investigators such as Rounsaville et al. (1982) reported that opiate addicts have been shown to have high rates of depression, antisocial personality characteristics, schizophrenia, manic symptoms and alcoholism. T'Suang et al. (1982) reported that long term drug users had more premorbid personality disorders and greater familial risk of schizophrenia. Recently McLellan et al. (1983) observed that narcotic users showed some evidence of moderate depression, primary sociopathy character and criminality.

Opiate addiction is considered to be associated with psychopathology and social pathology. There is controversy about whether these attributes are the result of being an addict or whether they preceded and possibly caused the onset of drug abuse. York (1970), Wursmer (1978), Khantzian et al. (1974) are of the view that addiction takes place in individual with pre existing psychopathology and represents either a regression or an attempt to cope with it. On the other hand, investigators such as Mirin et al. (1976), Woody and Blaine (1979)

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suggest that psychopathology related with opiate addict is the result of such factors as direct effects of intoxication or withdrawal symptoms.

Besides these issues, studies in this area are also criticized on methodological grounds. Rounsaville et al. (1982), for example, disclosed that inconsistencies and ambiguities in diagnostic terms made comparison and interpretation difficult and highlighted the need to adopt standardized and explicit criteria for classifying addict population. Recently, a number of reports have confirmed that among addicts in out patient treatment setting, moderate to severe level of depression can be documented.

Moreover, there has been a recent upsurge of interest in psychopathology as a factor in treatment of this group of patients.

A final factor in the increased interest in psychopathology in opiate addicts is the relatively direct applicability of research findings to clinical practice. In general, psychiatric disorders, have been shown to predict poorer treatment outcome.

Researchers in our country overlooked the importance of the association of psychopathology and opiate addiction and its impact on abstinence. Specifically the present study was designed to fulfill the following aims:

To follow up and compare rate of abstinence in the opiate addicts with or without psychopathology after treatment.

Material and Methods

114 opiate addicts admitted in Desaddiction Centre attached to Psychiatric Centre, Jodhpur for treatment from December, 1985 to May, 1987 were the subjects for this study. There were 58 patients of opiate addiction with psychopathology. Fifty six patients of opiate addiction without psychopathology were taken for comparison. Diagnosis of opiate addiction and other psychiatric disorders was made as per I.C.D. IX criteria. It was possible to discriminate clinically the patients with and without psychopathology.

Opium addicts with psychopathology were managed by psychotropic drugs and other appropriate therapy until they were symptoms free.

Opium was suddenly withdrawn and patients were maintained on clonidine (Satya et al., 1988). Patients were hospitalized for 4-8 weeks. Follow up of each case was done after the completion of one, three, six, nine and twelve months. Thus the total period of follow up was one year. At follow up each patient was thoroughly evaluated for drug use and psychiatric status. During follow up the patients who did not turn up were either mailed letters or contacted personally by a psychiatric social worker. It may be noted that 4 cases with psychopathology and one without psychopathology were dropped due to non-completion of detoxification.

The abstinence rate in the two groups of opiate addicts was compared at each stage of follow up and significant difference, if any was determined using X² test.

Results

Results of the study reveal that there is no significant difference between the two groups as regards to various socio-demographic characteristics like age (age range being 20 to 60 years and 21 to 65 years with mean age 30.5 years and 30.2 years in two groups), sex (all males), marital status (93.1% and 94.6% being married), education (79.3% and 65.7% being illiterate) and domicile affiliation (60.3% and 66.1% being from rural area). Also mean dose of opium (being 14.0 gm and 13.5 gm/day) and
mean duration of intake (being 4.6 gm and 5.0 years) did not differ significantly. Other results of the study have been shown in Tables 1 to 3.

Table 1. Types of psychopathology observed in Opiate addicts.

| Type of psychopathology | Opium addicts with psychopathology (N=58) | N | % |
|------------------------|------------------------------------------|---|---|
| 1. Psychopathic personality disorder | 22 | 37.9 |
| 2. Neurotic disorders | 11 | 19.0 |
| (i) Neurotic depression | 8 | 13.8 |
| (ii) O.C.N. (Obsessive compulsive neurosis) | 1 | 1.7 |
| (iii) Hysterical conversion reaction | 1 | 1.7 |
| (iv) Possession syndrome | 1 | 1.7 |
| 3. Manic depressive psychosis (Manic type) | 6 | 10.3 |
| 4. Manic depressive psychosis (depressed type) | 9 | 15.5 |
| B. Schizophrenia | 6 | 10.3 |
| 6. Psychosomatic disease | 4 | 6.9 |

It is obvious that antisocial personality is the commonest disorder being present in 37.9% of the opiate addicts, followed by various depressive disorders (29.3%), M.D.P. manic type (10.3%), schizophrenia (10.3%), psychosomatic diseases (6.9%) and other neurotic disorders (5.1%).

Discussion

As to the question of association of psychopathology and opiate addiction, our results have indicated that anti-social personality or psychopathy (34%) and depressive disorders (25%) were the commonest patterns of psychopathology observed. This finding is in line with some of the observations made in the western studies. Rounsaville et al. (1982), for example, reported that major depression was the commonest psychiatric disorder in opiate addicts (17%) followed by alcoholism, anti-social personality and anxiety disorders. Similarly, Khantzian et al. (1985) using DSM III criteria found that of the 133 narcotic addicts, 77% met the criteria for one or more on axis I disorders (depression 56%; mixed 4%, anxiety related disorders 11% and other diagnoses 6%) and 65% met criteria for personality disorder on axis II, of which one third had anti-social personality disorder. In total 93% met the criteria for one or more psychiatric diagnosis other than substance use. These observations are further substantiated by Rounsaville and Kleber (1983). They found the psychopathological states like major depression (34%), minor depression (3%), alcoholism (15%), phobic disorder (11%), Obsessive compulsive neurosis (2%), schizophrenia (2%) and hypomanic disorder (2%). Mclellan et al. (1983) recently observed that narcotic addicts show some evidence of moderate depression, primary sociopathology, psychopathology characters and criminality. However, presence of hysterical reaction and psychosomatic disorders in association with opiate addiction is rarely reported in the west, which appears to be not uncommon feature in our set up. Due to ignorance some persons believe that opium gives relief in psychosomatic disorders and therefore initiates medicinal use which gradually results in addiction.

As regards prognosis, it can be well inferred that addicts with some or other form of psychopathology have considerably poor abstinence rate than addicts having
Table 2. Follow up of the two groups of opiate addicts.

| Duration       | Contacted | Drop out | Death | Relapsed | Abstinent | X²  |
|----------------|-----------|----------|-------|----------|-----------|-----|
| After 1 month  |           |          |       |          |           |     |
| Gr. A          | 50        | 4        | —     | 25       | 25(50.0%) | 11.1* |
| Gr. B          | 53        | 2        | —     | 10       | 43(81.1%) |     |
| After 3 months |           |          |       |          |           |     |
| Gr. A          | 50        | 4        | —     | 34       | 16(32.0%) | 18.7*|
| Gr. B          | 52        | 3        | —     | 15       | 37(71.2%) |     |
| After 6 months |           |          |       |          |           |     |
| Gr. A          | 49        | 5        | —     | 39       | 10(20.4%) | 22.5*|
| Gr. B          | 52        | 3        | —     | 17       | 35(67.3%) |     |
| After 9 months |           |          |       |          |           |     |
| Gr. A          | 48        | 5        | 1     | 39       | 9(18.8%)  | 18.1*|
| Gr. B          | 51        | 3        | 1     | 20       | 31(60.8%) |     |
| After 1 year   |           |          |       |          |           |     |
| Gr. A          | 48        | 5        | 1     | 39       | 9(18.8%)  | 18.1*|
| Gr. B          | 51        | 3        | 1     | 20       | 31(60.8%) |     |

Gr. A—Addicts with psychopathology (N=54)
Gr. B—Addicts without psychopathology (N=55)

* — p<.001

It is evident that the abstinence rate in addicts with psychopathology is significantly lower than the abstinence rate in addicts without psychopathology at each stage of follow up. In other words, the relapse is significantly more in addicts with psychopathology.

Table 3. Abstinence in the opiate addicts with psychopathology at various stages of follow up.

| Duration       | Psychopathic Personality (N=20) | Depression (Neurotic dep. + M.D.P. depressed) (N=15) | Schizophrenia (N=6) | M.D.P. (Manic type) (N=6) | Psychosomatic disorder (N=4) | Other Neurotic disorder (N=3) | Total |
|----------------|---------------------------------|----------------------------------------------------|-------------------|--------------------------|-----------------------------|----------------------------|-------|
| After 1 month  | 4                               | 4                                                  | 3                 | 2                        | 4                           | 3                          | 23    |
| After 3 months | 2                               | 7                                                  | 1                 | 0                        | 3                           | 3                          | 16    |
| After 6 months | 0                               | 5                                                  | 0                 | 0                        | 3                           | 3                          | 10    |
| After 9 months | 0                               | 4                                                  | 0                 | 0                        | 3                           | 2                          | 9     |
| After 1 year   | 0                               | 4                                                  | 0                 | 0                        | 3                           | 2                          | 9     |

It can be inferred that in addicts with a diagnosis of anti-social personality or a major mental illness like schizophrenia and M.D.P., abstinence rate is zero. Depressive addicts have a comparatively poor abstinence (26.7%) as compared to addicts with other neurotic disorders (66.7%) or psychosomatic diseases (75%).
no psychiatric abnormality or disorder. Complete abstinence without relapse in opiate addicts is an exception rather than a rule (Szara and Bunny, 1973) therefore varying figures of abstinence have been reported by various researchers. Venkoba Rao et al. (1978) for example, in a 5 year follow up study reported an abstinence rate of 46% in opiate addicts. More encouraging results have been reported by researchers working on opiate addicts of western Rajasthan. For instance, abstinence rate in opiate addicts reported by Purohit and Vyas (1982) in their follow up study lasting 5 years, has come to be 73%. Satija et al. (1987) found an abstinence rate of 57% and 67% in relapsed and first contact opiate addicts, but in none of the above studies the addicts with and without psychopathology were studied separately.

As regards to mechanism of production of psychopathology in opiate addicts, it is not much clear. Kleber et al. (1983) observed that high degree of psychopathology displayed by opiate addicts is the result of use of illicit substance frequently in response to psychiatric symptoms like depression and anxiety, leading to addiction. Dysfunctional attitudes and personality factors, including depression, low self esteem, rebelliousness, low aspiration are associated with the initial use of marijuana or other illicit drugs (Kandel, 1978; McLellan et al., 1979). The social stigma and disruption caused by the need to maintain habit is responsible for psychopathology. Drug abuse (intoxication and withdrawal) might contribute to the development of psychosis (Mirin et al., 1976). Some investigators attribute it to 'State dependent learning' or biochemical changes in the C.N. S. resulting from prolonged alteration of biogenic amine systems.

In the opinion of T'Suang et al. (1982) psychomimetic effects of commonly abused drugs closely mimic a number of psychotic features of these psychiatric illnesses. As a result differential diagnosis and fundamental question concerning the role of drug abuse in the onset and course of major psychotic illness have remained unsolved and they suggested the need to consider the interaction of psychological, constitutional, organic and genetic factors in the assessment of drug abuse with psychosis.

McLellan and colleagues (1979) explain the higher rate of psychopathology in opiate addicts firstly by the fact that psychopathology is associated with treatment failure so such patients will go on accumulating. Secondly continuing the illicit drug may itself be responsible for development of psychopathology. Thirdly due to increase in cost and non availability, opiate use may become more selectively appealing to those with propensity for deviation. Lastly opiate addicts seeking treatment have higher rates of psychopathology than those not seeking treatment. Same authors (McLellan et al., 1983) in another study concluded that it is not the severity of alcohol or drug use problem but the severity of psychiatric morbidity at the time of admission which is the best general indicator of overall status at admission and the best predictor of the post treatment outcome. The present study has brought out the importance of psychopathology associated with opiate addiction in prognosis, such cases appear to have poor prognosis. However, cause and effect relationship is yet to be clarified for psychopathology associated with opiate addiction. Large size of sample with more sensitive diagnostic tools and statistical methods may help to clarify these issues.
REFERENCES

Dole, V. P. and Nyswander, M. E. (1967). Addiction: A metabolic disease. Archives of Internal Medicine, 120, 19-24.

Kleber, H. D., Weissman, M. N., Rounsaville, B. J., Prusoff, B. A. and Wilber, C. H. (1983). Imipramine as treatment for depression in opiate addicts. Archives of General Psychiatry, 40, 645-653.

Khantzian, E. J., Mack, J. E. and Schatzberg, A. F. (1974). Heroin use as an attempt to cope: Clinical observation. American Journal of Psychiatry, 131, 160-164.

Khantzian, E. J. and Treece, E. (1985). D. S. M. III—Psychiatric diagnosis of narcotic addicts: Recent findings. Archives of General Psychiatry, 42, 1067-1071.

Kandel, D. B. (1978). Convergences in prospective longitudinal surveys of drug use in normal populations. In: Longitudinal Research in Drug Use: Empirical Findings and Methodological Issues, (Eds) B. Kandel, Washington, D.C.: Hemisphere publishing.

McLellan, A. T., Woody, G. E. and O'Brien, G. P. (1979). Development of psychiatric illness in drug abusers: possible role of drug preferences. New England Journal of Medicine, 391, 1310-1314.

McLellan, A. T., Luborsky, L., Woody, G. E., O'Brien, C. P. and Druley, K. (1983). Predicting response to alcohol and drug abuse treatments: Role of psychiatric severity. Archives of General Psychiatry, 40, 620-625.

Miri, S. R. Meyer, R. E. and Monanee, E. (1976). Psychopathology and heroin use: Acute and chronic effects. Archives of General Psychiatry, 33, 1503-1508.

Purohit, D. R. and Vyas, B. R. (1982). Opium addiction treatment camp: A follow-up study. Journal of Clinical Psychiatry, 6, 55-61.

Paton, S., Kesten, R. and Kandel, D. (1977). Depressive mood and adolescent illicit drug use: A longitudinal analysis. Journal of Genetic Psychology, 131, 267-39.

Rounsaville, B. J., Wissman, M. M., Kleber, H. D. and Wilber, C. H. (1982). The heterogeneity of psychiatric diagnosis in treated opiate addicts. Archives of General Psychiatry, 39, 161-166.

Rounsaville, B. J., Thomas, R., Kosten, M., Weissman, M. M. and Kleber, H. D. (1986). Prognostic significance of psychopathology in treated opiate addicts. A 2.5 year follow-up study. Archives of General Psychiatry, 43, 739-745.

Satija, D. C., Sharma, D. K. and Purohit, D. R. (1987). A study of stressful events, psychiatric diseases, treatment and follow-up of relapsed cases of opiate addiction. Indian Journal of Social Psychiatry, 3, 227-237.

Satija, D. C., Natani, G. D., Purohit, D. R., Gaur, R. and Bhati, G. S. (1988). A double blind comparative study of usefulness of clonidine and symptomatic therapy in opiate detoxification. Indian Journal of Psychiatry, 30(1), 35-69.

Szara, S. and Bunn, W. E. (Jr.) (1973). Recent research on opiate addiction: Review of a National Programme in opiate addiction: Origin and Treatment. S. Fisher and A. M. Freedman (Eds), Washington: V. H. Winston.

Tsuang, T., Simpson, J. C. and Kronfol, Z. (1982). Subtypes of Drug Abuse with Psychosis. Archives of General Psychiatry, 39, 141-147.

Venkoba Rao, A., Sukumar, L. and Neelambhardharam, C. (1978). Drug addiction: A report from Madurai, India. Indian Journal of Psychiatry, 2, 310.

Woody, G. E. and Blaine, J. (1979). Depression in narcotic addicts: Quite possibly more than a chance association. In: Handbook on Drug Abuse, R. L. Dupont, L. Goldstein and J. O'Donnell (Eds.), Washington: D. C. : U.S. Government Printing Office, NIDA.

Wursmer, L. (1978). The Hidden Dimension, Psychodynamic in Compulsive Drug use. New York: Aron-Son.

York, C. (1970). A critical review of some psychoanalytic literature on drug addiction. British Journal of Medical Psychology, 43, 141-52.