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Evaluation of drug taking behaviour

SOME THEORETICAL AND METHODOLOGICAL CONSIDERATIONS

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Evaluation of treatment modalities of drug dependence has specific theoretical and methodological difficulties. Ideological and invested interests also complicate the literature. This paper analyses the situation on different levels, concentrating on controversies about theoretical concepts, and problems connected to the variability of drug taking populations. Some suggestions are given.

Key words: Drug dependence – methodological problems – suggestions – treatment research and evaluation.

Treatment of drug dependence is necessary as well as difficult, and evaluation is correspondingly important. The literature on the subject is rapidly growing, but there is a conspicuous lack of commonly accepted methodology, and results are often difficult to compare.

In this paper we shall analyse this situation and clarify some preconditions for acceptable solutions. We have found some papers attempting this, but none analysing the problems to our satisfaction (*Frykholm* (1973), *Gunne* (1973), *Haastrup* (1973), *Peterssen* (1974)).

BASIC PROBLEMS IN EVALUATION

All types of treatment evaluation are difficult. The later years have, however, brought significant progress in the field of psycho-pharmacological therapy, behaviour therapy and also some clarification concerning psychotherapy. Evaluation in the field of drug dependence therapy profits from these developments, but there are additional problems that hamper progress. Firstly, the problem of drug taking youths has increased so rapidly that it requires social and political solutions involving significant economic resources as well as traditional values and attitudes: for instance, the protection of individual rights, society's regulation of criminality, etc. The evaluation of treatment modalities thus has considerable economic and political interest and consequences.

Secondly, the drug taking itself provokes controversies among therapists and evaluators because of fuzzy concepts of drug taking behaviour, theoretical disagreements concerning the concept of dependence and conflicting basic ideological attitudes and value systems. Thirdly, the drug taker's special situation itself leads to additional evaluation problems.

There are thus three levels of problems connected particularly with the evalua-

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tion of the treatment of drug taking behaviour. The second and the third of these need some clarification.

CONTROVERSIES HAMPERING TREATMENT EVALUATION

Disease versus symptom controversy

Several schools of therapists regard drug abuse as a symptom. In accordance with this they hold that one should not focus upon the drug taking behaviour in itself. The opposite view is that drug abuse itself is the primary problem, the "disease of drug addiction". The only important criterion for evaluation is accordingly the drug taking behaviour.

Controversies arising from conflicting theories on dependency

The different theories of development and maintenance of drug taking behaviour may be roughly divided into four categories. The first set of theories is based on biology. The dependency is explained as changes in physiological functions, emphasizing tolerance, cross tolerance, and abstinence reactions. The drug taking is again the relevant criterion for evaluation.

The next set of theories is founded on psychodynamics. Dependency is related to unresolved traumas or unsatisfied needs in early life or to the development of neurotic conflicts and patterns. This leads to evaluation of the patient and his treatment in terms of the original problems or the individual's subjective experiences in life.

In the third set of theories the dependency is explained as a social phenomenon. On the micro level it is seen in relation to social problems, such as economic difficulties, living conditions or a drug taking neighbourhood. On the macro level one focuses upon the political situation at large, and the patient's problems are often expressed in terms such as alienation, self-respect, repression and so forth. The consequence is often that evaluation through measurement of drug taking behaviour will be felt as irrelevant or, worse, as disguising the real problems. The fruitful evaluation will be seen as the one concentrating on social functioning, specifically on the patient's ability to conceive and react to his political and social situation.

The fourth type of theory explains dependency as a result of social processes: social learning theory and sociological theories on deviance. In learning theory drug taking is seen as a gradual learning process affecting the behaviour repertoire and the reinforcement situation. In theories on deviance the development is seen as steps in a career that gradually form the drug taker role, the addict identity and the drug taking sub-group that goes with it. This means measurement of the drug taker's behaviour repertoire, social roles and contacts.

Controversies concerning the "seriousness" of drug taking behaviour

In spite of the widespread use of terms as dependency and addiction, there is no general agreement on the content of these terms. The type and quantity of actual drug taking may vary widely. The quality question is amply illustrated by the varying attitudes towards cannabis. One evaluator may judge a patient

as abstinent regardless of regular use of cannabis. Others will regard this as addiction.

There are also conflicting views concerning quantity. Some are mainly concerned with heavy main-lining and tend to overlook more sporadic drug taking, while others are concerned with any kind of drug taking or definite number of injections taken. The consequence of such controversies is that the criteria used in evaluation often make comparisons meaningless.

Controversies originating from different views on the "dependency dynamics" status versus process

Attitudes towards drug taking behaviour grow out of a mixture of moral, ideological, legal and social reactions. Nevertheless, it is possible to distinguish between the view that the drug taker is changed in some kind of static way and the view that drug taking is a way of living or a process. The illness model is an example of the former view, moral attitudes and career thinking examples of the latter. The first view tends to regard any drug taking behaviour after treatment as "relapses", while the second might view the same behaviour as learning experiences leading up to relevant choices.

More extensive descriptions of models of dependency are found in *Jørgensen* (1979), *Waal* (1973) and *Mossberg & Änggård* (1978).

SPECIFIC PROBLEMS CONNECTED WITH DRUG TAKING PATIENT POPULATIONS

The conflicting and complex picture of the theoretical and ideological attitudes of the therapists is matched by the conflicting and complex picture of the patient populations in question. There are several levels of problems. *Sjøberg* (1975) has given a clear description of the situation.

Problems connected with the drug taker's situation in society

The "addict" is traditionally seen as a hostile, untrustworthy and manipulating person. He is in addition also often subject to legal and social sanctions in the situation of evaluation. It is therefore not obvious that he will give reliable information at follow-up.

Problems originating from heterogeneity of patient populations

As the terms dependency and drug taking involve the use of intoxicants of varied social status and pharmacology, it is no wonder that the literature on treatment experiences is conflicting. Patient populations described as "dependent", drug taking or addicted therefore comprise persons with moderate use of cannabis as well as groups of main-liners. In addition, several patients defy our attempt to sub-group the patients as dependent on different types of drugs. Often the most typical picture is a mixed abuse of intoxicants.

The patient might also after treatment for dependency on one type of drug, change to another.

In addition, two patients with quite similar drug behaviour may vary totally

in motivation and resources. Consequently, evaluation and treatment research are difficult.

The influence of society's attitudes towards drug taking and the availability situation

There are two self evident but important factors. One: without drugs – no abuse. Two: a situation with more intensive social control and antagonistic attitudes diminishes drug taking behaviour. Such factors will often influence the career of a drug taking person more than treatment. The result is that comparisons between different projects in different countries, even in different cities in the same country, are difficult.

The problem of "other life events"

This is a problem in several types of therapy research, but it is even more evident in the evaluation of drug taking behaviour. Often a patient has stopped taking drugs after "he met a girl", or had a religious experience, etc. This problem may be overcome by the use of control groups, but as this is often impossible, the problem remains.

CONSEQUENCES FOR THE EVALUATION OF DRUG TAKING BEHAVIOUR

The three different levels of problems should be clarified before undertaking the tricky business of evaluating drug taking behaviour. The first level, concerning the economic and political consequences of evaluation, necessitates more stringent research procedures than usual. One must strictly adhere to the principle of independent evaluators, and the connection between the evaluators and the treatment systems or their suprasystems should be clearly delineated. Preferably the evaluators should also specify their own commitments in the field.

These consequences make heavy demands on the resources and explicit openness of the evaluators. Such ideal demands should therefore perhaps be reserved for research purposes. It may be useful to distinguish this from evaluation with feed-back to the treatment system as primary aim. This may be better done by the therapists themselves.

The second level leads to the necessity of clarifying the theoretical basis of the evaluation. As to the symptom/disease controversy it should be possible to reach an agreement. In a patient population "the drug taking behaviour" is the completely overriding problem for the hard core. Interpersonal or social conflicts are more important for others. Evaluation methodology must therefore differentiate between groups of patients. This can be done multidimensionally with specific measurements for intrapsychic, social and other types of problems. It may also be approached by selecting homogeneous populations.

It is, however, also necessary to clarify the relative importance of the psychological, social and other aspects in a way that does not presuppose any specific ideology. As the different theories are all based on clinical factors, the methodology should ideally measure the individual's social situation, psychological

make-up, social roles and identification, in addition to his/her drug taking behaviour.

As to the controversies concerning drug taking dynamics, general opinion has recently changed to a process oriented view. A mechanistic model was more prominent in early attempts of evaluation. Any drug taking behaviour after treatment was seen as sign of relapsing illness. As between 90 and 100 % usually show drug taking behaviour within 1 year after treatment, the results had to be unduly pessimistic. In addition, they could only get worse with the passing of time, as every new relapse would be added to the others.

The opposite technique has, however, its own fallacies. The variability of drug taking behaviour makes the situation at the point of evaluation uncertain. An abstinence of 1 week, for instance, has no substantial importance. The compromise is to settle for drug taking behaviour in specific periods. Some evaluators settle for the last year, at the time of evaluation, others accept the last 3–6 months. Ideally one would hope for a common agreement as to the time, but one should at least decide on a specified period. The possibility of envisioning a process then lies in the use of repeated evaluation periods.

The controversies regarding the significance of drug taking behaviour should also be clarified. This means that an evaluation has to use specific and concrete criteria, which ideally should make it possible to compare different evaluations. This demands a method that delineates explicitly the frequency and quantity of the different drugs abused, and the seriousness, as shown by the ensuing results of the abuse.

Stringent clarification should thus make it possible to overcome several of the theoretical divergencies. The problems associated with the third level can also be solved to some degree. As to the reliability of the drug taker's information, the problems vary with the approach. If one is satisfied with drug abuse that leads to serious social conflicts, one may turn to registers or job histories. Considerable drug taking behaviour of course escapes this approach. One might, in addition, seek information from a third person with more information. Still one would suspect some "unnoticed cheating". As to personal interviewing, the reliability varies with the relationship between the ex-patient and the evaluator. Often, in our experience, ex-patients are very honestly informative, as controlled by alternative sources of information as urine analyses or information from other ex-patients. The strict procedure of urine analyses is a very time-consuming approach and has its own control problems. The personal interview seems the best approach, but this must be checked against the purpose of the evaluation. At the least, the problems of reliability of information must be discussed.

The problem of heterogeneity of populations is partly discussed above in connection with the analyses of controversies. Some measures should be used to specify type and intensity of the drug taking behaviour. Evaluation projects often fail in this respect, because of the multivariability of the drug taking behaviour. It is not sufficient to ask a patient if he has used opiates, one must have a baseline as to his regular behaviour towards the drug before treatment. This leads in one of three directions. One may select a specific type of behaviour, e.g. opiate main-lining, and ignore all other drugs. Alternatively one may describe all types

of drug taking behaviour and all changes. Abstinence means total abstinence from all illegal drugs. Thirdly one may try to select some common denominators through scaling or indices.

Finally, the evaluation also must specify the intake procedures and selection mechanisms, in order to understand the motivational factors.

As for the influence of the attitudes of society and the drug situation in general, not much can be done about it, except being aware of the influence of such factors in comparing data. The problem of "other life events" represents much the same situation. If one has large enough numbers, the problems diminish. Alternatively, one has to approach a close intersubjective understanding of the ex-patient. This, of course, means heavy reliance upon "soft methods". Only through knowledge of the drug taker's development and "inner world" can one really get an idea of the treatment impact. Some advantages do, however, accrue from concern with process and career. If one can prove that the career shows a significant change after treatment or is in some other way convincingly connected with treatment, some of the work is done.

THE METHODOLOGY APPLIED

These three levels appear in a multitude of ways in the literature on evaluation. The multifactorial picture of dependence and the theoretical and practical difficulties have led to diverse approaches in both the main areas of evaluation; the gathering of data and the evaluation methodology. It seems important to us to survey the various approaches and discuss advantages and disadvantages.

As for the gathering of data, one may distinguish between the following: a) the hearsay method – to evaluate from what one knows about the client or hear from other ex-patients or health personnel; b) the postcard method – the regular mailing of short questions to clients, or to selected client contacts and after-care personnel; c) the interview method, where each client is contacted personally; d) the register method, based upon criminal records, unemployment registers, suicidal and institutional registers, etc.

The hearsay method is particularly easy. When used on small populations for feed-back purposes, and systematically and regularly employed for all clients, it may give valuable information. The disadvantage is the difficulties outsiders have in judging the reliability of the information. It is also very often difficult to quantify the changes and meet specified criteria as demanded above.

The postcard method also has its advantages in simplicity. In addition questions may be standardized. It is superficial, though, and the reliability of the information is often doubtful.

The interview method is of course by far the preferable one, which makes it possible to meet the various demands of evaluation. It is, however, very time-consuming and often gives information that is subjective and difficult to generalize.

The register method has the advantage of not requiring cooperation from the ex-patients. It is therefore often used as reference information for other ap-

proaches. The results are very rough and it is therefore not useful in more close research and for evaluation purposes.

In summing up, the interview method is generally the preferable one. But it is often important to include also methods that can be used as a routine in clinical settings, such as the hearsay method or the postcard method.

This has implications for the choice of evaluation method. If one wants to have a method common to most evaluation projects, one has to have methodology that is usable within the different data gathering approaches. The common methods in the literature are: 1) global scales based on clinical judgement, with scaling, like improved, unchanged, worse; 2) specified scales or indices based on standardized interviews; 3) concrete description or measuring of behaviour or behaviour components; 4) open interviews with intersubjective understanding of attitudes and changes; 5) "self rating scales" with standardized scorings after various provoking sentences or described behaviour patterns.

Again the different approaches have their advantages and disadvantages. The global scales are often usable within a clinical context and they make it possible to detect a variety of changes. They do, however, make it exceedingly difficult to picture any baseline in evaluation, and the content of terms like "improved" or "unchanged" often lack concrete meaning. Specified scales based on standardized interviews are much more usable for research purposes, but they are often very difficult to use and dependent on the interview method. They also often select a particular part of the relevant information. Concrete measuring of behaviour component is an almost impossible endeavour. While it would give very concrete and valuable evaluation information, it would necessitate laboratory conditions or reliance on rough and superficial information. The open interview fulfils maximum demands of evaluation. It makes, however, for difficulties in generalization and in documentation of changes. The "self rating scale" is by far the most economic one. It also gives direct opportunity to document changes, but it is often difficult to grasp the significance for each patient. One also would have to standardize the scales in different connections concerning the different levels of problems connected to drug taking behaviour treatment.

CONCLUSION

The various problems connected with evaluation of treatment of drug taking behaviour have led to a multitude of approaches and techniques. The strong conflicting interests and theoretical divergencies make research and evaluation important, and also make it difficult to arrive at commonly accepted research methods. The existing methods tend to go in two directions. One is the research direction for more ambitious projects, which either rely on a multitude of methods or base themselves on exceedingly time-consuming interviews that give diffuse results. The other is based on superficial "hard core" facts that are far from clinical practice and therefore difficult to use in comparisons and evaluation. They may also be based on soft and unspecified data that give no baseline and no information to other evaluators.

In the opinion of the authors, one needs a common methodology that as far as possible is usable in simpler as well as in more complex projects and at the same time avoids the pitfalls of theoretical diversities and diffuse information. We have therefore attempted to develop such a scale (*Holsten & Waal* (1980)).

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