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Evaluation of the Effectiveness of Bridging Therapy: An Attempt Towards Paradiagmatic Shift in Nursing Research

Nelly A. Mahgoub

ABSTRACT

Bridging therapy is the term given to an innovative programme of therapeutic intervention based on the principles of continuity of care. Evaluation of the effectiveness of this model of care was conducted using the new trends of methodological mix. In this instance the research design employed the structure of quasi-experiment within the global frame of reference of action research. Discussion of the positive and negative aspects of this design is included.

INTRODUCTION

Bridging Therapy is regarded as the first longitudinal baseline evaluation research in the field of community mental health nursing.

Mangen and Griffith (1980) reviewed all the literature that appeared in the last thirty years concerning CPNs and the CMHS. Their findings showed that most of them were descriptive studies of the current service. Very little was found to be of evaluative nature.

The term " Bridging " therapy refers to bridging or filling the recognized gap in the service between hospital and community psychiat-ric care. This gap was reported to cause serious deficiencies in the mental health services (DHSS, 1975; Richmond Fellowship, 1981; Griffith, 1988).

Bridging therapy emphasizes the holistic view of client's care and resists the notion that community care could be an alternative to hospital care. Instead it regards hospital care as part of community care and accepts clients' needs for hospitalization as necessary.

The Structure of Bridging Therapy Study

In order to develop a plan of work for testing the theory underlying 'Bridging' therapy, a number of questions were proposed:

1- What are the deficiencies in the current service ?

2- How to improve or establish a service that could be more effective in meeting clients' needs?

3- Why should the proposed model of care" Bridging therapy" be used in preference to the conventional system of care?

Clearly the second question represented the aim and focus of this study. Nevertheless, the other two questions were also very important to pursue due to the prerequisites of conducting evaluation research. Therefore the **aim** of this study was to examine the effectiveness of an innovative model of care that would comprehensively meet clie- nt's needs both inside and outside the hospital.

Consequently the empirical testing of bridging therapy became a necessity in order to ensure that suggestions made to improve the mental health service could stand on firm grounds of"scientific" acceptability.

Following the classical approach of evaluation, research meant the employment of the experimental design to ensure the causal inference and generalisability. The logic behind using experimental design for such type of study was not an easy choice and the methods used were confronted with problems. Scholars such

as Grad *et al.* (1975) have questioned whether it is possible to collect baseline data about something as diverse as mental healt service. While Wing and Hafner (1973), on the other hand, regarded such type of research as "no different from other scientific research", whilst Hunt (1987) described in some detail the inherent difficulties in collecting baseline data in the field of mental health care.

Problems associated with the strict adherence to true experimental design for the study of human behaviour have been under considerable review for the last decades (Carstairs, 1968). Writers who show less dogmatic views such as Bernstein (1975), Windle and Neigher (1978) and Weiss and Rien (1970) have acknowledged the fact that studies take place in the world of "action" and it is this which must ultimately define the rules.

Windle and Neigher (1978) stressed that "The researcher to become evaluator must reorient to task based on 'decisions' rather than, conclusions', applications rather than implications and utilisation rather than replication". The implication of this point of view is that varied research designs may have to follow less 'optimal' 'true' experiments which would nevertheless be regarded as ideal (Bernstein, 1975).

The diversity of opinions about what are the acceptable components necessary for evaluation research are continuing to enlarge the gap between polarities of research philosophical perspectives. Consequently the choice of a particular research design represents a very difficult challenge for researchers who decide to conduct an evaluation research that would assess issues concerned with both the quality and quantity.

Pasovec and Carey (1985) see the choice of research design as a balance between the practicalities of true experimentation and the relevance of the data produced to service concerned. Hunt (1987) summarized the characteristics of evaluation research which differentiate it from other types of research: "In the case of evaluation the researcher begins with vaguely defined independent variable (the programme) and is asked how and to what extent it affects vaguely defined as undefined goals (the dependent variables)".

Cook and Campbell (1979) produced their model of quasi- experimental design which supposedly would help minimize the sum of problems which may arise in cases where complete rejection of experimental model may take place. In support of that view was the following statement by Weiss (1981). "Let us by all means recognize that no investigation can be totally 'objective' but this should not drive us to the opposite pole of abandoning all efforts to adhere to standards of fairness in selection and treatment of evidence".

Quasi-experimental design was first introduced by Campbell and Stainley (1969). It exposed the problems inherent in the classical randomised control group design. They demonstrated how it is nearly practical or ethically acceptable to employ such design in the study of human beings. On the other hand it is extremely difficult to ignore the uncontrolled extraneous variables which can represent rival hypotheses for causing the change in the dependent variables under study.

These uncontrolled variables were identified by Cook and Campbell (1979) to represent threats to both internal and external validity. Threats to internal validity include: history, maturation, instability of measures,statistical regression, selection factors, experimental mortality and interaction.Threats to external validity on generalisability include: interaction effects of testing, interaction of selection and experimental treatment (Hawthorne effects) and irrelevant replicabiliaty of treatments.

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* Science: Scientia (Grk) for knowledge. Scientially (adv). Systematic and formulated knowledge (moral, political, natural, etc). (Oxford Dictionary).

The Current Research Design

The understanding of the nature of such limitations of the quasi-experimental design required the adoption of certain strategy for the current study that allows eclecticism as a process of design improvement. Therefore a methodological mix design of both quantitative and qualitative was adopted in accordance to the suggestions made by many authors such as Goodwin and Goodwin (1984), Patton (1980) and Silverman (1985).

The current study follows Patton's (1980) mixed methodology which he identifies as "mixed form: naturalistic inquiry: qualitative measurement and statistical analysis". Patton's model was translated in the current study to include the necessary principles of both quasi-experimental design and action research. This complex design required a clear identification of the research questions despite the fact that both outcomes and treatments may be vaguely defined. In addition Cohen and Manion's (1986) definition of action research was also followed in the study... "action research is small-scale intervention in the function of the real world and close examination of such intervention".

Having identified the methodological mix design of the current study, it became clear that the task of combining both qualitative and quantitative approach is not a straightforward procedure. Clearly the opposite was true.Writers in support of either paradigm are continuing the argument on the grounds that ".. they occupy alternative - rather than complementary - philosophical spaces" (Bednarz, 1985). He highlights that ' methods' are neutral in the sense that a hammer is neutral to its use for building or smashing purposes. Bednarz (1985) believes that philosophical orientations are not neutral and they determine which perspective a research procedure follows.

It appears that Bednarz argument would find support amongst researchers who might be predominantly preoccupied with the idea to produce 'elegant' positivistic research design which usually fails to meet the requirement of practical application, especially in the field of mental health and cross- cultural settings (Carstairs, 1968; Foster ,1987).

The issues of combining both quantitative and qualitative research approaches could simply be viewed as the two sides of one coin.

Methods of Data Collection in the Current Study

In correspondence to the current research design which uses both qualitative and quantitative app- roaches the following strategy was designed to meet these requirements:

a) Detailed informative data on client's care that are based on situation/ incidence study within a holistic context were obtained by the employment of semi-participant observation and in-depth interviews. These data were analysed and presented using the case study approach (Yin, 1984).

b) Structured quantitative data regarding the assessment of clients progress, improvement or otherwise were obtained by the employment of three standardized instruments:

1- the EPI: Eysenck Personality Inventory (Eysenck and Eysenck, 1963)

2- the GHQ: General Health Questionnaire (Goldberg and Hether, 1979).

3- the BAI - 30: Behavioural Adjustment Inventory (Developed by the researcher, Mahgoub, 1986).

These combined methods of data collection appeared to be most suitable for this study design because of the following:

1) Action research and quasi-experiment share similar grounds, in the sense of testing the effectiveness of certain intervention and assessing the outcomes. Case study approach as discussed by Yin (1984) accepts the necessity of producing detailed report about the context of the study as well as formulating generalized conclusion based on the outcomes of standardized measurements.

2) Limitations of each method of data collection if used singly or in isolation could lead to considerable misunderstanding of the phenomena under study. For instance, the use of semi-participant observation if used singly, is under threat of observer's bias Hawthorn effects, Halo effects, etc. Triangulation of methods of data collection which employs less subjective instruments, e. g. questionnaires or inventories, could help to minimize such limitations.

3) To enhance the construct validity of the information obtained, raters from different disciplines as well as the clients and their families have participated in the evaluation and the rating of client's progress/ improvement or otherwise.

4) The relevant qualities of the rigorous approach of the experimental design included the selection of two groups of clients, treatment group and control group.

Quasi-experimental design helps to find some form of resolution for issues concerning the ethics of experimental design and the inevitable human individual differences. Cook and Campbell (1979) suggest a non-equivalent control group, while Cohen and Manion suggested a match equivalent control. In this current study, a matched equivalent control group was selected according to a set criteria of age, sex and nature of problems encountered by the clients.

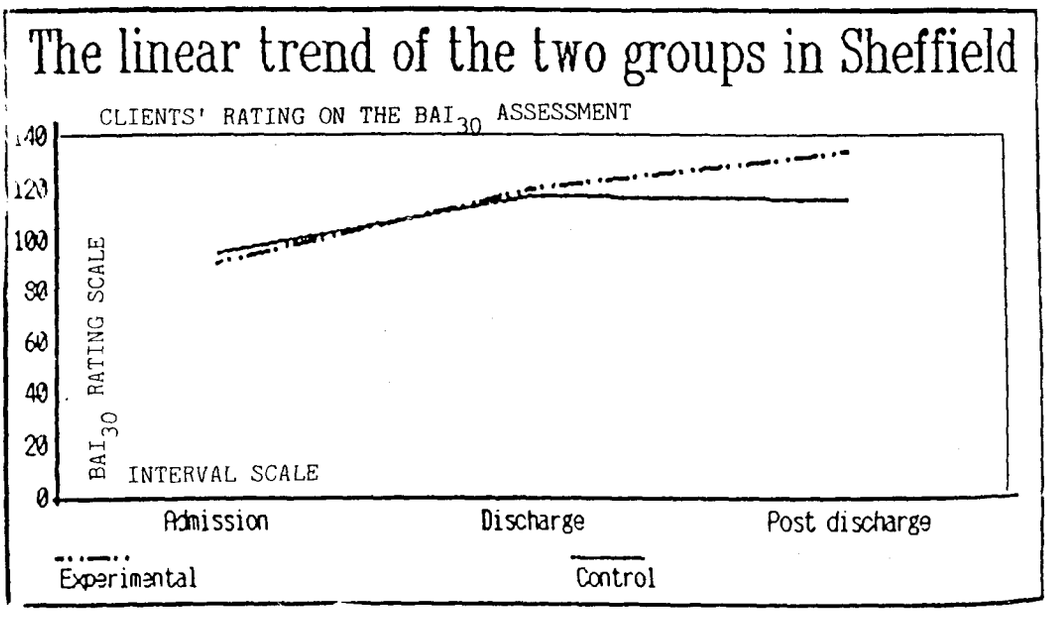
The Study Outcomes and Interpretation

Forty clients participated in this study, i. e. twenty in each group. Purposeful sampling procedures were used following the principle of typical cases. The inherent selection bias was regarded to be counter-acted by the use of equivalent control group selected using the same procedure (Cohen and Manion, 1986).

Assessment was an ongoing process which initiated a contingency procedures of modifications for the input throughout and output. However the assessment using the standardized instruments was conducted on three occasions: admission to hospital, discharge and at the termination of the follow-up. Obtained data (qualitative and quantitative) indicated significant improvement achieved by the treatment group. However the difference between the two groups failed to be statistically significant.

A number of explanations of these results were sought.

1) The instruments used for this assessment are limited and not very sensitive to recognize the actual progress presented by clients in the treatment group.



This is clearly illustrated in the following figure which shows the linear trend of progress of the treatment group.

2) The relapse rate and rehospitalization was 50% higher among the control group who received the conventional model of care.

3) The intensive psychodynamic changes that take place within the clients of the treatment group could be only presented in qualitative terms. Therefore the use of case studies could help to appreciate the actual progress of each client in comparison to his / her previous level of distress. Consequently the effectiveness of 'bridging' therapy could be viewed within that context.

CONCLUSION

Attempts were made to develop an eclectic evaluation research design. This initiated a number of problems such as:

1) The continuous shift between the two poles of objective / subjective interpretation of data .

2) The dual role of the researcher as a semi-participant observer and as an assessor.

3) The complex design of this type of study is not cost effective in terms of time, money and personnel.

Overall the experiment involving bridging therapy have demonstrated the possibility of a paradigmatic shift in evaluation research.

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AUTHOR

Nelly A. Mahgoub, BSc., MSc., Lecturer, High Institute of Nursing, Cairo University.

ABSTRAIT

L'évaluation de l'effet, du "Bridging therapy": un essai en vue d'un changement paradigmatique des recherches d'infirmerie

"Bridging Therapy "est le nom que l'on donne au programme innové de l'intervention therapeutique qui a comme base les principes de continuité d'assistance. L'évaluation de l'effet de ce model d'assistance a été effectuée à l'aide des nouvelles tendances de mixage methodologique. Quant à ce propos, le plan de recherche, a employé la structure de quasi-expériment dans le cadre globale de référence de l'action du recherche. La discussion des aspects, positifs et negatifs de ce plan y est inclue.

الموجز

تقييم فعالية العلاج بإقامة الجسور : محاولة إنتقالية فى أبحاث التمريض

يطلق لفظ " العلاج بإقامة الجسور " على برامج التدخل العلاجى التى تقوم على أسس استمرارية الرعاية، ويقدم هذا البحث طريقة جديدة لتقييم هذا النموذج العلاجى، وقد صمم البحث بنظام شبه تجريبى داخل إطار كلى قائم على المحتوى البحثى، ويناقش البحث الوجوه الإيجابية والسلبية لذلك الطراز البحثى.