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CLINICAL PSYCHOLOGY IN A GENERAL HOSPITAL : CONFLICTS AND PARADOXES

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ABSTRACT

Over the past decade clinical psychologists have increasingly begun to work in general hospital settings, but little published research has dealt in depth with the adjustments and negotiations that need to occur at the interface of clinical psychology and medicine. In this dissertation, the relationship of the psychosocial to medicine and the professional relationships of psychologists and doctors are discussed. Consultation-liaison psychiatry and multidisciplinary treatment teams are presented as two ways in which medicine has attempted to deal with the psychosocial, and which provide potentially useful models of practice for psychologists. Four cases that were referred to the author while working as an intern clinical psychologist in a Neurosurgery unit are discussed in terms of the insight they provide in understanding implicit assumptions about and expectations of psychology. In addition, the head of this Department of Neurosurgery and the two clinical psychologists working in this department were interviewed, and these interviews, together with the cases, provide the material for a discussion of various issues which face clinical psychologists in this unit. These include : the power structures and relationships in the unit; the use of consultation-liaison psychiatry and multidisciplinary treatment team models of practice; the inability of psychologists to fulfil present demands for their services; and the issue of reactive or proactive definition of psychological functions. Finally, some suggestions for enhancing the psychological contribution to patient care in Neurosurgery are made, based on the principles that arise out of the discussion.

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BACKGROUND TO THE STUDY AND OVERVIEW

During my clinical internship I was placed for two months in the Department of Neurosurgery at a large teaching hospital in Cape Town. I had not previously worked in a non-psychiatric hospital setting, but nonetheless had expectations of the kind of work I would be doing, and the types of referrals I would be receiving. The majority of the cases referred to me during my placement in Neurosurgery fitted my expectations of the work I would be doing, and sometimes modified or added to this understanding. For example, a request for a psychometric assessment of a head-injured patient's readiness to return to work was a common type of referral. A request to deal with family conflict that was being played out at the bedside of a very ill patient was another type of referral that fitted my expectations of the job.

Difficulties however arose when referrals that conflicted with my understanding of my job were made. These cases raised issues about my expectations of the psychological function, as well as issues about the assumptions about and expectations of psychology implicit in the referrals. In particular, these cases suggested work that psychologists might be doing that is not part of an official job-description. The purpose of this study is to examine some of the issues raised by these referrals.

In this paper I begin by reviewing some of the literature that describes the variety of psychological work in hospital settings. Psychology's presence in non-psychiatric hospitals implies a recognition of the psychosocial aspects of health care; different medical models and the degree of their recognition of the psychosocial will be discussed. Two ways in which medicine has attempted to deal with the psychosocial, namely consultation-liaison psychiatry and multidisciplinary treatment teams, will be presented as potentially providing useful ways of understanding the work of clinical psychologists in general hospitals. Difficulties for psychologists in hospital settings will be discussed, as will the problems in integrating a psychosocial understanding of health with medical care. The discussion up till this point will provide a background for the issues raised by four cases referred to me while working in Neurosurgery. These issues will be amplified in a discussion drawing on interviews with the head of the Department of Neurosurgery and the two clinical psychologists working in Neurosurgery. The paper will conclude by suggesting some

principles arising out of the discussion which might form the basis of practical strategies for enhancing the psychological contribution to patient care.

INTRODUCTION

1. Clinical psychologists in hospital settings

Traditionally, clinical psychologists in hospital settings have worked with psychiatric patients. The literature suggests however, that over the last decade increasing numbers of clinical psychologists have begun working in hospital settings such as Paediatrics, Neurology, Surgery, Oncology, Spinal Cord Injury units and others (Asken, 1979; Blanchard, 1982;Dana and May, 1986; Du Toit, 1985; Gabinet & Friedson, 1980, Masur, 1979; Schlebusch, 1983; Taylor, 1987). Despite the increasing numbers of psychologists moving into general hospital settings, the field remains relatively new and undefined. Practice is inadequately described, and there is little literature as yet on the adjustments and negotiations that need to occur when psychologists interact with the medical system. The field is described by a plethora of terms, for example, "health care psychology", "behavioural medicine", "medical psychology", "health psychology", and "mental health consultation". Asken (1979) has used the term "medical psychology" and defined it as "the study of psychological factors related to any and all aspects of physical health, illness and its treatment at the individual, group and systems level"(p. 7). The field includes :

1) the study of the physiological results of psychological stress, and the effects of psychological factors on the progress and aetiology of physical disease, illness and recovery; 2) behavioural changes caused by disease, and the psychological reactions to disease or injury and its treatment, including the reactions of patients, families and staff; and 3) psychological factors involved in the definition of medical needs for a given population and the most effective means of administering and delivering such services, including attitudes towards health care systems, cross-cultural variables, and epidemiological demographic studies.

Schwartz and Weiss (1978) have defined the field differently. They use the term "behavioural medicine" which is defined to be "the interdisciplinary field concerned with the development and integration of

behavioural and biomedical science, knowledge and techniques relevant to health and illness and the application of this knowledge and these techniques to prevention, diagnosis, treatment and rehabilitation" (p. 250). Both definitions appear to be useful, the first due to its comprehensiveness, and the second for its emphasis on the interdisciplinary nature of the field. The terms chosen however, have been criticised as tacitly endorsing what has been termed the medical model (Masur, 1979). Elfant (1985) regards all of the terms listed above as indicative of the internalisation of the medical model in psychology, an issue which will be discussed in more detail later.

It has been pointed out by Bornstein, Costa and Matarazzo (1986) that health psychology and clinical neuropsychology overlap to a considerable extent, and they find it profitable to examine neuropsychology in terms of an understanding of health psychology in general. They report the view of health psychology as a broad, generic field which subsumes the area of neuropsychology (Belar, Wilson & Hughes, 1982, in Bornstein et al). This view is debateable, but because of space constraints will not be discussed further. This dissertation focusses on issues pertinent to clinical psychologists working in general hospital settings; because a neurosurgery unit is the context of this particular study, neurospsychological issues will be referred to where relevant.

A brief review of some of the literature describing the varying practice of clinical psychologists in medical settings follows. Linton (1981) has divided the work of the psychologist in a medical setting into 1) clinical work, 2) consultation), 3) training, and 4) organising. With the addition of 5) research, this description covers the varying work described in the literature. The levels at which psychological intervention is reported include : patients, families of patients, staff-patient relationships, intrastaff relationships, programme, and health care system.

1.1 Clinical work

Psychologists have initiated innovative projects such as the use of video games in the rehabilitation of head-injured patients, biofeedback therapy in the treatment of chronic pain and of patients with spinal cord injuries, and the treatment of conditioned aversive reactions to chemotherapy for cancer patients (Mickel, 1982). More conventional counselling and therapy has been offered to people disfigured by head and neck

cancer (Petrucci & Harwick, 1984). Psychologists and neurologists have collaborated in a headache screening clinic, in which psychologists play an important part in assessment and treatment (Harper, Wiens & Hammerstad, 1981). Clinical work described by Nethercut and Piccione (1984) includes family counselling, brief, crisis and long-term therapy, behaviour modification, psychiatric assessment, and psychometric assessment. A survey of a large number of paediatric and health psychologists suggested that many of these psychologists are involved in a wide range of diagnostic and treatment activities (Stabler & Mesibov, 1984). With reference to clinical neuropsychology, Lezak (1983) comments that the relative sensitivity and precision of neuropsychological measurements allows neuropsychology to make a valuable contribution to patient care. These measurements provide : a means of assessing the progress of disease and the effects of medical treatment, surgery and rehabilitation; a direction for rehabilitation strategies; and the detailed information necessary for helping patients and their families to adjust to brain injury.

1.2 Consultation

A psychologist as mental health consultant has three particular strengths (Gabinet & Friedson, 1980), namely psychometric testing, a broad background in the behavioural sciences, and the advantage of being outside the normal hospital hierarchy. This third strength is seen as being particularly advantageous in facilitating communication between the psychologist and the staff, between physicians and nurses, and between staff and patient. Because of the broad training background of psychologists, they may be particularly suited to working with all subsystems, including relationships between patients, and the entire multidisciplinary team, for example. Lewis (1979) focuses on the counter-transference problems of non-psychiatric staff, and describes a psychologist helping the staff to analyse and work through their feelings, and their acting out of patients' unconscious needs. He claims that "it is readily apparent that it is virtually impossible for doctors in clinical practice to avoid intense emotional involvement with their patients....In addition, the setting of the doctor's relationship with his patient may be in real life and death situations which in themselves give rise to intense anxiety" (p. 42). Psychological consultants may act with the goal of imparting specialized information (Stabler & Mesibov, 1984), may intervene in staff dynamics (Petrucci & Harwick, 1984) or may use their understanding of systems theory to consult to a health care system (Tulkin & Frank, 1985).

1.3 Training

Education about psychological issues is seen as particularly important for staff and patients (Nethercut & Piccione, 1984), students (Gabinet & Friedson, 1980) and the non-psychological members of psychiatric consultation-liaison teams (Murphy, 1984). A survey of a large number of psychologists working in health care settings reports frequent complaints by psychologists of problems which might be remedied by education about psychological issues; these alleged problems include doctors' lack of psychological sophistication and inability to use psychologists effectively. This is unfortunately accompanied by a lack of interest on the part of psychologists in educating doctors in order to change attitudes (Stabler & Mesibov, 1984).

1.4 Organising

Linton (1981) describes the development of a multidisciplinary Spinal Cord Injury team largely organised on the initiative of a psychologist, with the purpose of the project being to coordinate the services offered to these patients and to attend to their psychological needs. It may be that psychologists are suited to this function for the reasons cited by Gabinet and Friedson (1980) in their discussion of psychological consultation, namely psychologists' separation from the normal hospital hierarchy and their broad psychological training, which includes, for example, group theory and practice.

1.5 Research

It has been suggested that psychologists in hospital settings have a particular contribution to offer with respect to their research skills, such as in the development and organisation of health maintenance programmes (Tulkin & Frank, 1985). A survey of psychologists in such settings indicates however that research tends not to be the main focus of their work (Stabler & Mesibov, 1984). This may be explained in part by Nethercut and Piccione's (1984) finding that doctors are less familiar with the research than the clinical work of psychologists, and that doctors perceive the clinical skills of psychologists to be more useful. Kopelman (1981) in his discussion of psychological contributions to neurology, argues that too great an emphasis has been placed on the diagnostic function of psychologists in neurology, to the detriment of rehabilitation and research. He also notes a tendency for neuropsychologists to research relatively rare conditions, such as visual agnosia, and suggests other important areas of research, namely : wider aspects of

epilepsy and the amelioration of its psychological and social complications; identification of the precipitants of epilepsy; prognostic validity of psychological tests and the prediction of outcome of closed head injuries and focal lesions; and the mechanisms and dysfunctions of language.

2. Medical models and the psychosocial aspects of health care

Toulmin (1978) has pointed out that there are numerous medical models or ways of conceptualizing disease. The dominant system of health care and theory of illness in Western medicine has been labelled "biomedicine" (Fabrega, 1978), and has also been termed the bodily defect theory or mechanistic model of disease by Toulmin. In this model, sickness is "the breaking, wearing-out, or other malfunctioning of defective parts or systems within the Body-Machine" (p. 59). The biomedical model has been described as reductionistic and body-mind dualistic (Engel, 1977) in that it explains health and sickness in terms of the physical, chemical and physiological changes in the bodily systems of an individual, divorced from the person's experience of sickness, and the social context (Kleinman, 1978). Sullivan (1986) has argued that it is not body-mind dualism that has resulted in biomedicine's neglect of the psychosocial, as Engel suggests, but rather a dualism between the knower (doctor) and the known (patient). According to Sullivan, before the autopsy acquired its current importance in medicine, diseases were identical to their symptoms and doctors were dependent on the patient's experience of sickness for diagnosis. As a result of the autopsy becoming the definitive way to understand disease, it becomes possible for the doctor to identify disease independently of the patient's experience of it. Modern biomedicine understands the body most fully and easily "not when its [the body's] capacity for self-knowledge and interpretation are intact, but when opened to the vision of others on the autopsy table" (Sullivan, 1986, p. 344, my insertion). This then is Sullivan's explanation of biomedicine's neglect of the psychosocial : it is not the mind that is inaccessible to biomedicine, but rather the sentient person who is superfluous to biomedicine.

Engel (1977) suggests that "all medicine is in crisis" and further, that "medicine's crisis derives from...adherence to a model of disease no longer adequate for the scientific tasks and social responsibilities of...medicine" (1977, p. 129). The biomedical model's usefulness in elucidating the biological mechanisms of disease should not be underestimated, but its limitations in addressing the psychosocial aspects of

sickness are well documented (Bignami, 1982; Engel, 1977, 1981; Fabrega, 1978; Kleinman, 1978; McHugh & Vallis, 1986a; Rogers, 1982). The biomedical model does not recognise "the fact that medicine is as much a social science as it is a biological science" (Tancredi & Edlund, 1983, p. 314). In particular, the biomedical model obscures the disease-illness distinction. Barondess (1979) defines disease as a "biologic event, characterised by anatomic, physiologic or biochemical changes or by some mixture of these. It is a disruption in the structure and/or function of a body part or system". Illness is defined as the subjective experience consisting of "an array of discomforts and psychosocial dislocations resulting from interaction of a person with the environment. The environmental stimulus may be a disease, but frequently it is not" (p. 375). Disease is therefore neither a necessary nor a sufficient condition for the presence of illness (Sullivan, 1986). It must be noted that even though disease is defined as a "biologic event", it is nonetheless a social construct; biological events need to be socially constructed as "disease" rather than "not disease" in order to acquire significance for medicine (Armstrong, 1987).

Engel (1977) has responded to what he terms the crisis of medicine by advocating a systems approach incorporating the biological, psychological and social in order to accomplish the medical task of caring for the whole patient, and he names his approach the biopsychosocial model.

Toulmin (1978) has responded by arguing that we have been persuaded to trade in the concepts of complaint and remedy for those of disease and cure. By this he means that the physiological concept of disease must be applied in practice within a broader human context in which all complaints have multiple aspects, including, for example, the somatic, moral, legal, social, and others; it is scarcely ever possible to tell in advance which of these aspects contribute to the patient's complaint. Thus the biomedical doctor may fail to cure the disease because of mismanagement of the patient. Toulmin believes that the biomedical or mechanistic medical model inappropriately facilitates the patient being seen as the sum total of his or her biological ailments; he notes that complaints do not divide neatly into those dealt with by surgeons and those dealt with by psychologists. Toulmin says that "our present era of professional specialization is liable to bear down very hard on the people who really need help" (p. 68). Health professionals have a responsibility to address the patient's entire complaint; if the patient requires legal

advice, for example, then the doctor or psychologist's responsibility, as Toulmin sees it, is to explain how and why the patient should gain access to legal advice.

Despite differences in explanation and elaboration, it seems that there is agreement that biomedicine ignores psychosocial issues. The extension of clinical psychological practice into non-psychiatric hospital settings is based on the premise that factors other than the biological play a part in health, disease and illness. The criticisms of the biomedical model have gained apparent acceptance amongst many health and social service workers (McHugh & Vallis, 1986b). Engel's biopsychosocial model has been used as the theoretical framework for a new approach to the training of medical students over the past ten years (Lock & Lella, 1986); and some research indicates that large numbers of doctors in hospital practice believe psychological and social factors to be relevant to their own practice of medicine (Mayou & Smith, 1986; Nethercut & Piccione, 1984; Schenkenberg, Peterson, Wood & DaBell, 1981). The health professions have responded to these more holistic concerns about patient care in a number of different ways, and each of these models of practice has implications for psychological practice in general hospitals.

2.1 Consultation-liaison psychiatry

Historically, the medical specialty of psychiatry has been the branch of medicine most concerned with psychosocial issues, and the subspecialty of consultation-liaison psychiatry has been the link between the Department of Psychiatry and the rest of the hospital. Models of practice developed by consultation-liaison psychiatrists may have some relevance to psychologists working in hospital settings. Johnson (1985) describes shifts in emphasis in consultation-liaison psychiatry. Initially "patient-oriented", that is, focussing on "what is wrong with the patient?", consultation-liaison psychiatry then adopted a "physician-oriented" approach in which the focus of consultation became the difficulties in the doctor-patient relationship. More recently, the focus became "situation-oriented", in which difficulties are seen as residing in the patient, the interaction of patient and staff, or in the hospital milieu, and thus treatment might focus as much on the staff as on the patient. "Systemic consultation" is the fourth development in consultation-liaison approaches. This approach sees consultation-liaison psychiatrists helping to create "a psychologically healthy milieu for all individuals (patients, families and staff) who interact in the hospital" (Tarnow &

Gutstein, 1982, p. 166), and advocates that "psychiatrists develop intervention strategies which carry the potential of altering the structure and function of the hospital as social system" (Johnson, 1986, p. 273).

Consultation-liaison work is fraught with ambiguity and conflict, as is clinical psychological work in similar situations.

Position. The position of consultants with respect to the teams they consult to is ambiguous. In some hospitals they are required to participate in ward activities such as ward rounds, while maintaining distance so as to be able to consult effectively (Lewis, 1979; Wise & Berlin, 1981). Consultants share patients with other staff members, but are not usually considered part of the team (Gabinet & Friedson, 1981). Wise and Berlin (1981) note that only if the consultants are of sufficient status will they be included in the decision-making process in ward rounds, which indicates the tenuousness of their position. The fact that psychiatrists, psychologists and social workers sometimes do the same work also contributes to professional ambiguity.

Problem. The problem the consultant should focus on is contentious. For example, a consultation about a patient may be requested, but investigation may reveal the difficulty to lie in patient-staff relationships (Lewis, 1979). The consultant and the consultee may then disagree as to the most appropriate way of dealing with the problem, as they do not agree on the definition of the problem.

Patients. A large number of consultation requests refer to patients who do not have psychological difficulties or a diagnosable mental disorder, but do disturb the smooth functioning of a ward (Hengeveld & Rooijmans, 1987; Linton, 1981; Mizrahi & Abramson, 1985). The issue is one of conflicts of interests; the clinician has to decide whether he or she is primarily responsible to the consultee or the patient (Elfant, 1985), and all clinicians who work in institutions experience conflicts between their work as healers and their work as members of institutional staff (Toulmin, 1978). In situations like these, the clinician may attempt to influence the patient's behaviour, not because it is evidence of psychiatric disturbance, but because it creates difficulties in the health care system. Tancredi and Edlund (1985) argue that consultation-liaison psychiatrists are called in to deal with staff-patient conflicts only when the situation has

become unmanageable and is "fraught with moral and political ambiguity" (p. 295), referring to ethical issues that become interlinked with purely medical management, such as the issue of patient rights and autonomy which may be curtailed by paternalistic practice of doctors or psychologists. There is a temptation for the consultation-liaison psychiatrist or a clinical psychologist in the same position to ignore these moral and political issues. For example, a consultee may be wanting the consultant to play "persuader" and convince a recalcitrant patient into agreeing to what the consultee believes to be best for the patient. Consultants may be asked to be the "communication link" between doctors and patients, which may involve the avoidance of the real problem of lack of communication between these primary parties (Tancredi & Edlund, 1983). Tancredi and Edlund comment that the consultant " may actually be functioning to prevent dialogue among the patient, physician and staff. When this occurs he is used to subvert further negotiations, thereby alleviating the medical care providers of the need to further examine the scientific and motivational bases of their own decision" (p. 302). They conclude therefore that consultants need to be aware of these conflicts of interests and the ways that they deal with them; their intervention may allow consultees to focus on medical and technical issues to the exclusion of moral and political issues.

2.2 Multidisciplinary treatment teams

The multidisciplinary treatment team has become the method most often used to coordinate the activities of different health care professionals who provide varying services to the same patients (Lowe & Herranen, 1981). Lowe and Herranen propose that teamwork is a process that can occur only when it is supported by the environment in which it exists, and that the concept of teamwork must be understood and practised in order to fulfil its potential. Underlying their model of teamwork is the belief in the equal value of each of the participants in the team, and the model values "open communication, shared leadership, decision-making and responsibility" (Lowe & Herranen, 1981, p. 4). The model therefore is likely to be incompatible with norms of medical and hospital practice which express and reinforce the biomedical notion of doctors having ultimate authority and ultimate legal responsibility for the care of patients. This perhaps explains why the usual multidisciplinary approach is one in which "different professionals add their piece of the clinical puzzle but look to one member to put it together" (Shaw, 1986, p. 63).

Cott (1986) deals with this issue by suggesting that because of a blurring of the disease-illness distinction (defined earlier), and the increased medicalisation of health, doctors have become inappropriately burdened with non-medical issues. He proposes therefore that doctors treat and be responsible for disease, and that other health professionals should treat and be responsible for illness. The authority and legal responsibility of doctors would then be clearly delineated and confined to strictly biomedical issues. McHugh and Vallis (1986a) see this as impractical in many situations, and also undesirable in its fragmentation of disease and illness. Shaw makes the point that "if the care of a difficult patient is presented in such a way that the physician handles the biological findings, the psychologist gives a perspective on the person, the social worker speaks of the family, the occupational therapist discusses the functioning at work and the nurse presents ward behaviour, then one does not have comprehensive health care. Instead the essence of bringing various professionals together to address the patient's distress is lost" (1986, p. 69). Shaw's (1986) conception of a multidisciplinary team that fully addresses psychosocial issues requires that all health care professionals be equally responsible for patient care, that commonalities rather than differences between professions be stressed, and that team members should share a broad conceptual model of the patient's illness in terms of the biological, the personal and the environmental (Leigh & Reiser, 1982). Shaw does not however address the issue of legal responsibility as Cott has attempted to do, and the issue is difficult to resolve.

3. Difficulties for psychologists at the interface of clinical psychology and biomedicine

I have described some of the attempts to include an awareness of psychological issues in health care, but nonetheless biomedicine is the dominant medical model, and it is this that informs much of the thought and practice of doctors in hospital settings. Many writers have argued that paradigm conflicts are inevitable at the interface of clinical psychology and biomedicine, because of the different aims and methods of these disciplines.

Elfant (1985) has identified key elements of the paradigm clash with respect to the psychosocial aspects of health care, namely differing views of how patients and health professionals should behave and their respective responsibilities, the health professional-patient relationship, and the nature of sickness and cure.

Within the traditional biomedical model patients tend to be objectified in terms of their symptoms, which may lead to their being seen as sick, dependent, helpless and ignorant. Psychological approaches tend to view the individual as being distressed, attempt to avoid the patient's becoming dependent, and emphasise the individual's responsibility for and participation in his or her own health care. Idiosyncracies and the complexities of individuals, their histories and the contexts of their behaviour and experiences are all seen as significant. In the biomedical model the health professional is seen as an expert who attempts to cure, whereas a psychological health professional attempts to facilitate understanding and change carried out by the patient. Psychology uses the terminology of medicine, but psychological distress cannot be fitted into the conception of sickness as a discrete entity with particular locus, and recognizable aetiology, course and prognosis (Hetherington, 1983). Similarly, psychological problems do not have solutions or cures in the same way that medical sicknesses do, and treatment occurs within a completely different time-scale as a result (Tefft & Simeonsson, 1979). In general, psychosocial difficulties are not easily explained in terms of the biomedical model.

It has been suggested that in the biomedical tradition the patient is not only objectified, but also is sometimes disparaged (Mizrahi & Abramson, 1985). This is based on the premise that because doctors are invested with a great deal of authority they are expected and may expect themselves to cure patients, even if this is unrealistic. If doctors are unable to cure patients, their sense of failure may be projected onto the patient, and the patient becomes an object of disparagement. Mizrahi and Abramson add that because social workers often work with these disparaged patients, they may become identified with them, and are also disparaged, and this may apply equally to psychologists. Mizrahi and Abramson note that social workers are often asked to "get rid of"(p. 47) these patients. This relates to Stein's (1986) discussion of "trolls", a derogatory term for patients who are seen as responsible for the control of their diseases. Trolls are regarded with contempt, and often referred to other medical services, as they thwart doctors' desires to effect cures.

The biomedical tradition tends to respond to the issue of patient rights with a benevolent paternalism, which is in direct opposition to the social work (and psychological) aim of facilitating patient autonomy (Mizrahi & Abramson, 1985). A particular instance of this conflict is in the area of patient compliance,

discussed earlier. From a conservatively biomedical point of view, the issue of patient compliance is one of persuading patients to adhere to medical advice. From a broader social science perspective however, instances of patient non-compliance may sometimes be understood as a realistic appreciation of the limits of medical expertise (Mizrahi & Abramson, 1985), or as the right of patients to judge the acceptability of recommended treatment for themselves (Zola, 1981).

The differing paradigms are rooted in the socialisation process that doctors and psychologists undergo through their professional training, which is related to the very different requirements of the two professions. Clinical psychology training programmes use the scientific-practitioner model, teaching clinical and research skills. Psychologists tend to be exposed to numerous models of human behaviour, health and sickness, including what has been termed the medical model. Consistent with the view of science as an approach and method of enquiry, students are expected to critically evaluate these models (Kingsbury, 1987). Medical training however, emphasises the acquisition of a large body of knowledge and clinical skills, a necessity for medical practice (Kingsbury, 1987; McNamara, 1981). Training tends to occur within a model and competing models are not investigated. Doctors are taught that science is a set of facts and procedures, which have to be readily available and useful in emergency situations when critical evaluation of the biomedical model is clearly of secondary importance (Kingsbury, 1987). Kingsbury believes that this difference in perspective results in difficulties in communication between the two professions, and also in less opportunity for doctors to understand psychological phenomena in terms other than those of the biomedical model.

A further source of difficulty lies in the differing knowledge bases of the two disciplines. Medical knowledge is said to be "hard" or objective knowledge, although this has been disputed (Engel, 1977; Schwartz & Griffin, 1986; Tancredi & Edlund, 1983). It focuses on facts and outcome, and is required to be oriented towards immediate intervention and urgency, in other words an action orientation. Social science knowledge on the other hand is said to be "soft" or subjective and impressionistic, focussing on values and process. It is required to include a holding orientation, caution, non-directedness and an emphasis on patient readiness (Mizrahi & Abramson, 1985). The different knowledge bases and views of science held by medicine and psychology may result in a disparaging medical perception of psychology at the interface of

the two disciplines, in that much of what psychologists do may be seen as vague, indulgent and inconsequential. Shaffer (1977, in Shectman, 1979) points out that "if students, or congressmen, do not understand the epistemological assumptions of social science, they will use 'common sense' as a basis of evaluation. Against such a background, basic research in social science will not be appreciated" (p. 819). The same may apply to doctors and psychological contributions.

Doctors are socialized into the expectation that they will assume management and leadership positions, with total responsibility for patient care, and other disciplines are seen as existing for the service of medicine (McNamara, 1981). "Lack of reliance on an interdisciplinary approach is certainly consistent with the belief that medicine is not a team activity and that physicians must always be in total control of patient care" (Taxay, 1978). They are trained to take charge even if uncertain as this is essential in life and death situations, but this may be an obstacle in other situations when teamwork is required. Consensus-building, negotiation and equal participation may be more useful in these situations (Mizrahi & Abramson, 1985). In training, psychologists often work as part of a team (Kingsbury, 1987), and the university setting of much of their training fosters an appreciation of the contribution that other disciplines have to offer. Thus doctors and psychologists may conflict in their approach to teamwork.

In sum, a number of writers have described a paradigm clash they believe to be inherent in the interaction between psychology as a social science and biomedicine. This has been said to add to interdisciplinary conflict through confusion and lack of shared values and understandings. More seriously however Elfant (1985), Hoffman (1979) and Drotar (1983) have argued that psychologists in hospital settings, who work alongside the biomedical model, run the risk of internalising this model. Psychologists may adopt the interests and assumptions of the dominant profession in their working environment, and Mizrahi and Abramson (1985) make the same point about social workers in medical settings. The internalisation of the biomedical model by psychologists is questionable professionally and ethically, for the limitations of the biomedical model are precisely in the neglect of the psychosocial. Hoffman (1979), in his discussion of the difference between psychological and medical psychotherapy, argues that what has been termed the medical model is not only unsuitable for therapy, but may also be antitherapeutic : "Ironically, it may well be that the medical orientation, insofar as it encourages a kind of addiction to one form or another of

medical assistance or rescue, actually invites as many or more catastrophes than it prevents - even excluding the catastrophe of addiction itself"(p. 578).

Organisational issues also play a part in the difficulties psychologists face in hospital settings. The hierarchical structure of hospitals is consistent with the professional hierarchy of medicine and allied professions, such as nursing, but the professional identity of psychologists tends to be less bound to hierarchies (Kingsbury, 1987; Tefft & Simeonsson, 1979). In medicine, full responsibility ultimately lies with the consultant, whereas qualified clinical psychologists are essentially independent and fully responsible for their own work. Hetherington (1983) notes that problems arise when there is a discrepancy in experience and perceived status between a consultant and a psychologist. Tefft and Simeonsson argue that the structure of the hospital itself interferes with the management of psychosocial issues in two ways. Firstly, the nursing staff who are often best able to observe and respond to psychosocial needs have little authority to do so, and communication through the complex hierarchies is often ineffective. Secondly, the psychosocial needs of the staff are not addressed, thereby interfering with their ability to respond to the needs of others.

Professional issues such as psychology's historical subordination to medicine (Hetherington, 1985), the differential allocation of prestige, power, status and money to psychology and medicine (Kingsbury, 1987), and psychology's encroachment on medical terrain (McNamara, 1981), for example in the treatment of pain, are also implicit factors to consider at the interface of psychology and medicine. The situation is made even more complicated because doctors tend to have little knowledge of what psychologists do (Kingsbury, 1987), and this may in part be due to the fact that the work of psychologists overlaps with that of other professionals such as social workers and physicians.

Difficulties which are inherent at the interface of clinical psychology and biomedicine in general have been discussed. Some literature is suggestive of particular difficulties that may occur when psychologists work in surgical units. With regard to consultation-liaison psychiatry, Golden (1975) states that "on a surgical unit the psychiatrist's main problems are his interactions with the physician, not with the patients". (p. 124). Stereotypes of surgeons are widely held. For instance, a chapter in a mainstream textbook on consultation liaison psychiatry (Golden, 1975) teaches that "surgeons are assertive, active, not given to intellectual

concerns" and cites research to support this (Myers, 1964, in Golden, 1975), and the humour referring to surgeons and their "surgical" personality is legion (Berman, 1976; Pheasant, 1974). While this stereotype may or may not bear any relation to reality, the fact of its being widely held is likely to influence the self-perceptions of surgeons, and the perceptions of surgeons by psychologists. There are also more objective factors which influence surgeons' attitudes towards psychosocial issues. Much of their time is spent in operating theatres, and therefore contact with patients and with other staff is limited, and communication is adversely affected. The pressure of work may result in attention being paid only to essential biomedical tasks and bizarre psychological states (Baudry & Wiener, 1975). Some research has indicated that relative to other doctors, surgeons are less concerned with emotional problems (Mayou & Smith, 1986). Lichstein (1984) reports less concern with psychosocial problems shown by surgeons than by specialist physicians, and suggests that possibly surgeons are more interested in concrete management recommendations, and feel less comfortable with the management of psychosocial problems. When compared to responses from other specialists, surgeons consistently rated psychological factors as being a less significant part of medical problems, and made the least number of referrals to psychologists (Nethercut & Piccione, 1984). Whatever the reasons, the trend is suggestive of greater difficulties for psychologists working in surgical units.

4. Problems with integrating the psychosocial into medical care

The awareness of the shortcomings of the biomedical model in its neglect of the psychosocial might have been expected to change the biomedical model, and thereby address some of the difficulties described above. However, biomedicine remains the dominant model of health and sickness in Western medicine, and this requires explanation. The biopsychosocial model has been criticised for its complexity and the difficulty translating it into workable terms (McHugh & Vallis, 1986b), although Engel (1980) has attempted to demonstrate its clinical applicability. More significantly Lock and Lella (1986) note that despite "a much broader approach in medical training...it has not encouraged any radical shift in thinking" (p. 48, original emphasis). The model offers a useful critique of biomedicine, but despite its superficial acceptance by the health and social sciences, it does not seem to be significantly changing medical practice. Engel's original argument (1977) ironically could have anticipated the failure of his model. He describes the biomedical model as originally being a scientific model, which has since become a (Western) culturally

derived belief system or folk model of disease. "In our culture, the attitudes and belief systems of physicians are molded by this model long before they embark on their professional education, which in turn reinforces it...The biomedical model has thus become a cultural imperative, its limitations easily overlooked. In brief it has now acquired the status of dogma" (1977, p. 130, original emphasis).

Medical knowledge and practice are historically, socially and culturally constructed (Lock & Lella, 1986), and the biopsychosocial model is therefore unable to replace the biomedical model purely on grounds of usefulness or adequacy of explanation. Despite the biopsychosocial model being used as a theoretical framework for the training of medical students, students are not expected to critically evaluate competing models of health and sickness; they are not made aware of the social construction of medical knowledge, nor are the value judgements that are part of medical practice sufficiently considered; the method of teaching suggests an appropriation of the psychosocial by biomedicine; and the psychosocial needs of students themselves are not considered (Lock & Lella, 1986). Thus the education of medical students, while explicitly espousing the biopsychosocial fmodel, implicitly militates against it.

Consultation-liaison psychiatry with one of its major aims being to educate non-psychiatric professionals about psychosocial issues (Lipowski, 1975) similarly fails to fundamentally change the practice of medicine. Psychiatry is devalued by the rest of the medical profession (Johnson, 1986) and psychiatric consultants collude in this devaluation by, for instance, explicitly not using psychiatric terminology (Baudry & Wiener, 1975; Golden 1975), an expectation which would be ludicrous if applied to any other medical specialty (Wise & Berlin, 1981). Johnson (1985) describes the marginality of the psychosocial tradition in medicine in relation to the dominant biomedical tradition, and many of his observations about consultation-liaison psychiatry apply to clinical psychologists in hospital settings.

For example, psychiatry does not have a technology comparable with the sophisticated biotechnology of laboratory tests and investigations, complex surgery, magnetic resonance imaging, and so on. The data important to psychiatry is particularly that data which is neglected by the rest of medicine. Consultation-liaison psychiatry is structurally marginalised : consultants work in the departments of other medical specialties. The "patient" in consultation-liaison work may be a network of people and may be disputed by

the consultee. This object of care is less tangible than the usual patient, and the results of intervention are also less tangible; they often cannot be written up in a patient's folder and cannot be seen to be concretely contributing to the cure of the individual patient.

Consultation-liaison psychiatrists sometimes collude in the marginalisation of the psychosocial by attempting to take on the outer trappings, at least, of the biomedical tradition - many wear white coats in order to be more acceptable to non-psychiatric staff, and the consultation-liaison psychiatrist is urged to "behave as much like a surgeon and as little like a psychiatrist as he can" (Golden, 1975, p. 128). It seems therefore that there is a long history of the marginalisation of the psychosocial in medicine, and despite one of the stated aims of consultation-liaison psychiatry being to change this, consultation-liaison psychiatrists collude in some ways with the continuing marginalisation of psychosocial factors.

Armstrong (1987) has taken a more critical look at the biopsychosocial model itself, and concludes that this model "would seem to offer both a strengthening of traditional, biological, reductionistic medicine and, at the same time, ensured the continued subsidiary status of the social sciences" (p. 1213). This, he argues, is achieved through its use of systems theory which avoids conflict by allocating different theories about the same phenomena to different levels of explanation. In this way, the necessity for comparing and judging the relative worth of various theories is avoided. Armstrong notes that "orthodoxy traditionally manages to control the threat from the unorthodox by a strategy of either marginalisation or incorporation" (p. 1213). He sees the biopsychosocial model as an example of the second strategy. In this respect he differs from other theorists. Lock and Lella, for example, document how biomedicine has incorporated the biopsychosocial model into the training of medical students, and in so doing neutralises the threat from the biopsychosocial model. Armstrong however sees the threat to biomedicine being a critical social science and consumer dissatisfaction with medical services, not the biopsychosocial model, which he understands to be part of the biomedical strategy to neutralise this threat. Of relevance to psychologists in particular is Armstrong's observation that one of the ways in which the biopsychosocial model strengthens biomedicine is "by ensuring that the patient - so often an awkward and unpredictable factor in the smooth operation of clinical work - is successfully 'managed'" (p. 1214). Armstrong believes that social scientists have a

responsibility to critically examine biomedicine and its assumptions, and to analyse new ways of conceptualising illness.

Armstrong's analysis of the biopsychosocial model has important implications for the practice of clinical psychology in hospital settings. Although his criticisms apply specifically to Engel's model, he nonetheless alerts all social scientists, including psychologists, to the subtle and extremely powerful strategies that may be employed to maintain the status quo of minimising and devaluing the importance of the psychosocial. Psychologists in hospital settings need to critically examine their work and its implications for health care.

5. Aim of the present study

Thus far in this dissertation, competing models of health and sickness have been described, namely the dominant biomedical model, limited by its neglect of psychosocial issues, and other models which have attempted to address the limitations of biomedicine. It has been suggested that conflicts are inevitable at the interface of clinical psychology and biomedicine, because of paradigm incompatibilities and conflicts arising from organisational and professional issues. This may make it difficult for doctors and psychologists to communicate and collaborate effectively. In addition, psychologists risk internalising the dominant biomedical model, and it is argued that this would be inappropriate and possibly antitherapeutic. Awareness of the psychosocial aspects of health has resulted in the development of consultation-liaison psychiatry and multidisciplinary treatment teams, both of which provide useful models of practice for clinical psychologists. The point is made however, that consultants may be tempted into serving the needs of the health care system rather than the needs of patients, thereby absolving medical staff of the responsibility for negotiating with patients and dealing with implicit moral and political issues. The multidisciplinary team may fail in its attempt to provide care for the whole patient if it conforms to established hospital power structures. Paradoxically, despite superficial acceptance of the importance of the psychosocial, the thought and practice of medicine does not seem to have been radically changed. For example, although the education of medical students explicitly espouses the biopsychosocial model, it implicitly reinforces the biomedical model. Similarly, despite the aim of consultation-liaison psychiatry to infuse a psychosocial awareness into medicine, consultation-liaison psychiatry is marginalised by medicine

and marginalises itself. The biopsychosocial model in particular has been described as a biomedical strategy to incorporate the psychosocial so as to neutralise the threat of a critical social science and maintain the status quo.

The aim of the current study is to examine clinical psychology in practice in general hospital settings, against this background of issues which have been drawn from various disciplinary sources. In particular, this study is intended to focus on the functions psychology serves by its location in hospital settings, and to address the issue of which needs are being served when clinical psychologists work in non-psychiatric hospitals. Clinical psychology in Neurosurgery will be examined as an example of such a hospital setting. While many of the problems raised may be to some extent inevitable, an awareness of these issues and their implications for psychological practice may clarify some ambiguous situations, and ultimately improve the contribution of clinical psychologists to patient care in Neurosurgery.

METHODOLOGY

The data was collected in two ways. Firstly, four cases that were referred to me while I was working in Neurosurgery are reported. Secondly, three semi-structured interviews were conducted with people working in Neurosurgery.

1. Cases

The information about each case is brief, comprising relevant biographical details of the patient, the initial referral request, and if relevant, further information about the problem gathered from the referring agent, the patient, or from other sources of collateral information. The cases were selected from the total number of cases referred to me during my placement in Neurosurgery on the basis of their not fitting my expectations of the work I would be doing. In other words, the assumptions about and expectations of psychology implicit in the referrals seemed not to match my assumptions about and expectations of psychology. My expectations of the work of a psychologist in Neurosurgery conformed closely to the job description of an intern clinical psychologist that is provided below in a description of the context of this study. It must be noted that these four cases are not intended to be representative of the cases referred to

psychologists in Neurosurgery. As mentioned in the background to the study, the majority of cases referred to me fitted my understanding of psychological work in Neurosurgery and the job description provided. While the referrals I have selected to examine may not be the norm, these referrals may be argued to be of particular value in examining implicit understandings of psychology and the psychological function in Neurosurgery. Strong (1979, p. 17) comments that for "the demonstration of the existence of certain rules, it is the unusual which very often has the greatest technical relevance...it may be the only means by which the nature of the rules may be brought home fully to the reader" (c.f. Garfinkel, 1967; Harre and Secord, 1972).

2. Interviews

Semi-structured interviews were conducted with three people working in Neurosurgery, namely :

- the head of the Department of Neurosurgery, designated Doc 1.
- the principal psychologist of the Department of Psychiatry, who works part-time in Neurosurgery, designated Psy 1.
- the clinical psychologist who works full-time in Neurosurgery, designated Psy 2.

The interviewees were asked questions about the history of psychology in Neurosurgery, psychological services at present, and future directions of psychology in Neurosurgery. The two psychologists were also asked to comment on a job description of an intern clinical psychologist in Neurosurgery, which I had constructed. Three of the four cases were presented to all three interviewees with the request that they comment on how a psychologist should respond to the referral in question. The fourth case was unintentionally not presented for comment to one of the interviewees, and therefore not presented for comment to the other two interviewees in order to maintain consistency. The full transcripts of the three interviewees are available on request, but are not included because of the limited space available.

The three interviewees were selected to be interviewed on the basis of their being policy-makers with respect to clinical psychology in Neurosurgery. They might be expected to be influential and knowledgeable, and might be expected to make the explicit rules governing the practice of psychology in Neurosurgery. Registrars, housedoctors, nurses, the intern psychologists and others may contribute to the construction of implicit rules about the practice of psychology, as do the interviewees. However, because of

the limited scope of this study, it was decided to interview the three people who could contribute data about both explicit and implicit rules with respect to psychology in Neurosurgery. This then was one of the reasons for conducting the interviews. In addition, the interviews were used to collect data about, for example, the history of psychology in Neurosurgery. The interviews were also intended to serve as a counterbalance to the subjectivity of the selection and interpretation of the cases. The interviews can thus be seen as a commentary on the cases and the issues raised by the cases, serving to amplify and extend these issues, and facilitating an understanding of them in the context of the history of clinical psychology in Neurosurgery and its current practice. These issues were identified in the literature; in addition, common themes emerged from the cases and the interviews.

In sum, the method used in this study must be understood as being "concerned with generating and plausibly suggesting (not provisionally testing) many properties and hypotheses about a general phenomenon" (Glaser, 1964, p. 438, cited in Strong, 1979).

CONTEXT OF THE STUDY

The Neurosurgery unit referred to in this study consists of :

- two wards in a large, teaching hospital covering all medical specialties (Hospital A),
- an "overflow" ward which is administered by Hospital A, but is situated in the grounds of another hospital.

In addition the unit is responsible for :

- neurosurgical patients in two children's wards at Hospital A,
- adult neurosurgery outpatients at Hospital A,
- child neurosurgery outpatients at Hospital B, a large teaching hospital for children.

The professional staff who work in this unit include medical staff, nursing staff, physiotherapists, occupational therapists, speech therapists, social workers and psychologists. Because the Neurosurgery unit is based in a teaching hospital, many students in different fields pass through the unit, and there is a high turnover of staff. At present there are two qualified clinical psychologists who do clinical work in Neurosurgery, one full-time and one part-time, and an intern clinical psychologist on two-monthly rotation.

At the time of my working in Neurosurgery as an intern, there was no formal job-description. The following job-description was constructed on the basis of my experience working in Neurosurgery, and it has been modified and checked by the two qualified psychologists working in Neurosurgery. The intern's job in Neurosurgery included the following :

1. Psychometric assessment of inpatients and outpatients for the purposes of : a) diagnosis; b) assessing the efficacy of medical treatment; c) assessing readiness to return to work or school; d) research
2. Assessment of inpatients for psychiatric disorder or psychological difficulties in addition to the medical disease or injury.
3. Support and therapy for patients and families of patients. Management of behaviour problems in the ward.

In addition, educating staff members about psychological factors and supporting staff members occurred informally.

Referrals to the intern are made in a number of ways, and are usually verbal, although sometimes are also written.

1. Some referrals are received from the head of the department and senior consultants at ward rounds.
2. There is a weekly meeting attended by the head of the department and sometimes one senior consultant, the sisters-in-charge of the wards, the two qualified clinical psychologists and intern psychologist, social worker, physiotherapist and occupational therapist. Some psychological referrals are made at this meeting.
3. More frequently, referrals are made by consultants, registrars and housedoctors in private, directly to one of the psychologists or the intern. (Consultants seldom refer directly to the intern).
4. Most referrals are made at a meeting which occurs biweekly. The staff who attend this meeting are usually one housedoctor, one or two senior nursing sisters, occupational therapist, physiotherapist, social worker and intern clinical psychologist. At this meeting referrals are usually made by the doctors or nurses, but sometimes also by the other health professionals, and referrals are made to the occupational therapist, physiotherapist, social worker and intern.

Clinical psychologists have been working in Neurosurgery since about 1982. Previously, some psychometric assessments were referred to a psychologist working in Neurology. The head of the Department of Neurosurgery motivated for psychologists to work in Neurosurgery because he had seen the research value of neuropsychological assessments in reports from other neurosurgery units. He envisioned psychologists being involved in psychodiagnostics, and also in helping brain-injured patients and their families to adjust to their altered circumstances. At present there are two psychologists doing research in Neurosurgery, in addition to the other psychologists already mentioned. Neurosurgery became a part-time placement for intern clinical psychologists in 1986, and a full-time placement in 1987, and as a result the teaching and supervision component of the jobs of the qualified clinical psychologists has increased. Psychology is relatively new to Neurosurgery, and it is therefore likely that the status and functions of psychology and psychologists are still to some extent being negotiated.

RESULTS AND DISCUSSION

In this section I report the four cases mentioned previously, that were referred to me formally or informally while I was working in Neurosurgery. Each of the four cases will be followed by some discussion of the ways in which they can be interpreted, aided by the interviewees' opinions and contributions. This discussion will be fairly brief as many of the issues will be raised again and explored in more depth in a lengthier discussion which follows. This second section relies on the content of the interviews and the issues illustrated by the four cases to explore the practice and position of clinical psychologists in Neurosurgery.

1. Cases

Case 1

M. was a middle-aged, Xhosa-speaking man, who had been admitted to hospital four weeks previously after collapsing at work. There was a great deal of uncertainty about his diagnosis, and for four weeks he had been undergoing investigations of various types. It was decided to biopsy his lung and his permission for this was required. He became angry, was obstreperous to the consultants in a ward round, and refused permission. I was asked to deal with this patient who was refusing a vital investigation. With a Xhosa-speaking nurse interpreting for me, I discovered that M. did not perceive himself to be ill as there had been no overt signs prior to his collapse, of which he was not fully aware. This had not been described to him and his admission to hospital while unconscious or confused had been involuntary. During his 4-week admission he had not experienced any symptoms of illness, nor had the covert symptoms, the diagnostic difficulties or the rationale for the various investigations been explained to him.

Discussion of Case 1

The assumption implicit in this referral is that the patient is irrationally refusing an important investigation, which may adversely affect the patient's treatment and prognosis. In other words, the referring doctors have made a patient-oriented referral to the psychologist, implicitly asking the psychologist to find out "what is wrong with the patient ?". Psy 1 seems to concur with this conceptualization of the problem and

understands the patient to be denying the seriousness of the situation, in an unconscious attempt to protect himself from his fear of dying. Doc 1 however, seems to approach the problem in a physician-oriented way, by looking at what is wrong in the doctor-patient relationship. He says : "it illustrates a defect in the medical care as things have not been explained...And I'm sure that if things had been explained to him, he wouldn't have become angry"[1]. Psy 2 seems to conceptualise the problem in a situation-oriented way. Like Doc 1 she notes the possible deficiency in medical care, but also looks at the possibility that the whole staff of the unit might be involved in the problem, pointing out that the problem may have been exacerbated by the patient being told different things by different staff members.

What the psychologist should do depends on how the problem is conceptualised, and it seems that there are numerous ways of understanding it. If the psychologist's focus does not conflict with that of the referring doctor, then the psychological intervention should perhaps be to counsel and support the patient. A problem arises however, if the referring doctor and the psychologist understand the problem differently. In particular, this problem has been defined by the referring doctor in way that it makes it difficult to address the problem on any level other than a patient-oriented one. If the psychologist's understanding concurs with that of Doc 1 or Psy 2, it would therefore be difficult to address underlying issues such as the doctor's part in creating and dealing with the problem. Doc 1 and Psy 2 have suggested that the doctor responsible fully inform the patient of the medical issues involved. An additional recommendation might be that the doctor involved acknowledge the patient's anger as appropriate. The psychologist in this instance would therefore be required to "diagnose" a situation or relationship (Psy 2) rather than diagnose a patient, and educate the doctor or staff involved, who would be in the best position to deal with the problem directly.

It seems then that the psychologist would be acting as a "communication-link" (Tancredi & Edlund, 1983) between doctor (and possibly staff) and patient. Tancredi and Edlund warn that this may serve to prevent communication between doctor and patient about important issues. In this case, a psychologist acting as a communication-link may allow the doctor not to deal with a problem he discovered, but rather to define it

[1] The doctor responsible for the care of this patient may have neglected to fully inform and explain to the patient the medical procedures being carried out. However, it is accepted that mistakes can happen, and at times some patients will be neglected in a busy and pressurised unit. It is not intended in a discussion of this case that blame be apportioned. Doc 1 has pointed out that this doctor is a good and well-intentioned doctor - in the biomedical aspects of the case.

as beyond his professional responsibilities, and it must be noted that the suggested "diagnosis" of the situation might have been equally well performed by the doctor as by the psychologist. Having a psychologist take care of this problem individualises the problem, making it less likely that the doctor in question will see the narrow definition of his professional responsibilities as being an important contributing factor in this case.

The feelings of this patient and his attitudes towards further medical procedures may be life-threatening, and this would seem to be the province of doctors, demonstrating the inappropriateness of strictly separating biomedical and psychological issues and responsibilities. The absence of a psychologist might, in another unit, result in the neglect of psychosocial issues, whereas the presence of a psychologist in this situation may paradoxically facilitate the separation of the biomedical and the psychosocial thereby allowing doctors to ignore the psychosocial. This may be reinforced by Psy 2's and Doc 1's view that neurosurgeons are highly skilled in their field, but are unskilled at dealing with the "human being aspects" (Psy 2) which psychologists are trained to deal with. It seems that this is a consequence of biomedicine's extremely narrow definition of doctors' responsibilities. Psychological work may then be defined reactively, and possibly too broadly, as encompassing all that doctors (and other health professionals) do not deal with. Included in this category may be psychologists dealing with the problems that result from communication difficulties amongst the staff (as in the inconsistencies mentioned by Psy 2). Psychologists who act as a communication-link between staff may be maintaining communication problems between staff that need to be resolved more directly, just as individuals who act as "switchboards" in groups or families, controlling and channelling all communication between members, prevent direct communication between the members, and pay a price in the time and energy demanded by this role, as well as the risks of being caught in the middle (Karpel & Strauss, 1983).

Case 2

A registrar briefly requested an assessment of a middle-aged man from Oudtshoorn (a small town about 400 kilometres from Cape Town), for the possibility of conversion disorder. On arriving at the ward, I asked for more detail about the referral, and it became clear that the registrar had decided that the man's complaint of neck pain had no physical basis. The patient was being returned home to Oudtshoorn that

afternoon, and the registrar requested that I inform the patient that he would be unable to receive a Disability Grant on the basis of his neck pain.

Discussion of Case 2

All of the interviewees pointed out that this referral is an inappropriate one, and a number of reasons were given : for example, the doctor in question has an inadequate understanding of psychometric assessment (Doc 1), the doctor is attempting to "pass the buck" (Doc 1), and the doctor has inappropriately made a diagnosis he is not qualified to make (Psy 1, Psy 2). While all of these criticisms are accurate, they do not fully describe the structure of the psychologist-doctor relationship in this instance.

This referral may be seen as an instance of the phenomenon described by Stein (1986) in his discussion of doctors' responses to "trolls" or patients seen as responsible for their diseases, who thwart doctors' attempts to effect cures; he notes that these patients tend to be referred to other services. In this case the doctor chooses the psychologist as the means of "getting rid of the patient" (Mizrahi & Abramson, 1985), and it seems an inappropriate referral in that the service that is being implicitly requested of the psychologist seems to have little connection to psychological expertise. In this sense it may indicate a lack of understanding of the capabilities and resources of psychologists.

However, the registrar does understand the official work of psychologists, as the initial referral - assessment for a functional origin of physical pain - was a very appropriate referral in terms of, for example, the job description of the intern clinical psychologist. The underlying "real" referral demonstrates an unofficial function of psychology in practice, as perceived by the registrar, namely to relieve doctors of the responsibility for dealing with trolls. It would seem that the registrar has learnt that in order to get the service he would like from psychologists, he needs to couch the referral in a particular way. Possibly through his experience of working within the present structure of professional relationships he has learnt that psychologists may offer this service to doctors. The referral indicates a medical understanding of the psychological function sufficient to make appropriate-sounding referrals. However, it may be that both doctors and psychologists also understand and sometimes accept the unofficial psychological function of serving doctors' needs by psychologists dealing with trolls.

A similar point can be made about the first case, where the referral - managing a patient whose behaviour is hindering his treatment - fits very well with the conception of psychological work presented in the job-description of the intern. If the difficulty had lain with the patient, the referral would have fitted with the intern's job description. Alternatively, if the difficulty in the doctor-patient relationship had been referred for psychological intervention, this would also have fitted with the intern's job-description. However, the referral sounded appropriate, but the psychologist was not being asked to intervene in a situation, but rather to remove the necessity for the doctor to deal with the issue.

Case 3

While working in Neurosurgery, I learnt that head-injured patients often suffer temporary difficulties, such as memory and concentration difficulties, which usually resolve within three to six months, and that these deficits may exist despite the absence of overt damage. As a result, it is the opinion of the psychologists who work in Neurosurgery that head injured patients should be advised not to return to school or work for at least three months. A seven-year old boy who had suffered a head injury in a motor vehicle accident was referred to me for a diagnostic psychometric assessment while he was an inpatient. About six weeks later I accidentally met him and his mother when he was returning as an outpatient for a check up. He introduced me to his mother who reported that he was having a lot of difficulty at school, and his teacher said that he had not re-adjusted. The family had apparently not been advised that this boy stay at home for three months. I explained this, and said I would ask the doctor to write a letter for the school. When asked to do so, the doctor was surprised to hear that head injured patients without detectable damage may nonetheless suffer temporary difficulties, and therefore should not return immediately to their former occupation.

Discussion of Case 3

All of the interviewees acknowledge a "slip-up" at some stage in this case. All three are in agreement, verbally, that the subtle cognitive deficits of head injured patients are important, and that patients should be warned of these and reassured that with time the difficulties diminish. All of the interviewees also suggest that the slip-up was made by an inexperienced doctor, and that the surprised second doctor was also inexperienced. Psy 2 suggests that the problem is the result of a lack of team coordination. This may well

be the case, and this issue will be discussed at a later stage, but a larger issue is : if this psychological knowledge is judged to be important for head injured patients, it is striking to note that there is no mechanism or routine to ensure that the information is made available to all head injured patients. While this knowledge may be important, it also seems to be compartmentalised. It is applied to some individual problems and cases, but it is clear from this case and from the interviews that it is not integrated into the general planning of patient care. A further indication of this compartmentalisation is the suggestion made by Doc 1 that psychologists should ensure that this information is given to patients by reminding him of this information with respect to the relevant patients on ward rounds. In other words it seems that psychological knowledge is in a way the property of psychologists, rather than being part of the general fund of knowledge about patient care used by all team members. Fragmentation and compartmentalisation of knowledge may contribute to the marginalisation of the psychosocial by preventing it from being part of the mainstream of knowledge.

Case 4

K. was a fifteen year old, Xhosa-speaking boy from the Transkei (a rural area about 1100 kilometres from Cape Town), who had hydrocephalus and resultant pain and paralysis of his legs. The psychologist was asked to assess him for depression, as he had been frequently crying. On further enquiry, I found that he spoke no English, and as I did not speak Xhosa, I asked the ward cleaning woman to interpret for me. K.'s first response to us was to request a bed pan. After this request was dealt with, K. complained to the interpreter of his constant pain, his dissatisfaction with the unfamiliar food of the hospital, and spoke of his desire to see his parents more frequently than only at weekends. While I was obtaining collateral from one of the nurses in the ward, this nurse explained K.'s difficulties to me as being due to loneliness, lack of contact with other people because of the language barrier, and the strangeness of the hospital environment.

Discussion of Case 4

As mentioned earlier, this discussion is not informed by the opinions of the interviewees.

The nurse who was asked to give collateral appears to have a good understanding of the patient's experience, and "diagnoses" the problem in a way which suggest a course of action : for example, a Xhosa-

speaking person could be asked to visit the boy on a regular basis, and in fact this would have been a practical suggestion as there was a Xhosa-speaking nurse working in the ward at the time. In other words, neither the "diagnosis" nor the consequent intervention would require specialised psychological skill. It might be argued that if the patient were clinically depressed, rather than lonely, frightened and uncomfortable, then the nurse's diagnosis and the related intervention would be insufficient to deal with the problem. A psychologist's skills might then be very necessary in assessing the problem. However, the fact that the patient is lonely and frightened is still a real problem that needs to be addressed, not necessarily by a psychologist, particularly if she or he cannot speak Xhosa.

The referral may be seen as evidence for Tefft and Simeonsson's (1979) proposition that nursing staff, who are often best able to observe and respond to psychosocial needs have little authority to do so. In addition it seems that overspecialization and narrow professional definition result in fragmentation and contribute to this referral. The referral seems to support the point made in the discussion of Case 1, that each health profession has a specialised function; the "human being aspects" of patients get split off and referred to the psychologist in each health professional's attempt to deal only with their limited area of expertise. Not only does the psychologist become responsible for all the problems that arise from the "human being aspects"; because these aspects are part of all problems, the psychologist's job tends to become one of filling in the cracks of a fragmented team, by dealing with all problems which do not fall strictly within a narrow definition of, for example, nursing. This may occur despite the competence of nurses to deal with such problems.

2. Interviews

Power structures and relationships

It was striking to note that when asked about the improvements and new directions for the future that they would like to see, both Psy 1 and Psy 2 responded not in terms of clinical or research work, but rather in terms of the team developments they would like to see. This suggests that difficulties lie in the structure of professional relationships. Psy 2, for example, would like to see the institution of a daily management meeting, and specifically mentions the need to improve communication between neurosurgeons and

psychologists. Psy 1 says that psychologists are part of the team, but are not emotionally accepted as part of the team. She would like psychologists to be integrally part of the neurosurgery team, and not just seen "as a helping profession"; she believes that surgeons feel separate and superior to the rest, and would like this to be different. It seems therefore that the problems that psychologists face in this unit, as perceived by them, are not problems with patients or the work that psychologists do, but rather problems with the administrative and professional structures in the unit.

Doc 1 believes the unit has a "good mixture between a healthy small volume of authoritarianism and free-and-easiness". He says "we cannot only be free and easy...then the machinery gets clogged up...and then nothing works eventually. There's wastage of time, of manpower, of material, because no-one knows who is going where", and acknowledges his authority in this unit. It seems from the responses of the interviewees that all three acknowledge that neurosurgeons form the power-elite in this unit. The psychologists speak about the effects of their exclusion from the power-elite on patient care, and the difficulties that are created for psychologists by the lack of coordinated teamwork. Psy 2 speaks of the splits in the team between the doctors and the others who are "in a sort of separate box". One of the main issues is attendance at the daily administrative meeting. Both Psy 1 and Psy 2 believe psychologists should attend this meeting, firstly because psychologists are involved with diagnosis, and secondly so that they can systematically respond to the patients who require psychological services. At present they have to investigate each new patient's history individually, or rely on rotating staff to remember the kind of information that psychologists need, which results in many patients' needs being neglected. It seems that both psychologists would like to be more integrated into the neurosurgery team, and in this instance 'team' refers to the team of neurosurgeons. Psy 1 for instance says "the only thing I would like is a more total acceptance as full team members, in the sense that we are not paramedics. I don't think that they totally understand that. They see us more as paramedics than as colleagues working with them". "Paramedics" refers to physiotherapists, occupational therapists and so on. It seems then that in Psy 1's eyes the existing power structure consists of a hierarchy with a number of levels. Although she believes that the neurosurgeons perceive psychologists and paramedics as being together on the lower rung, she sees the hierarchy as having three levels : neurosurgeons at the top, psychologists one rung down, and paramedics on the lowest rung. She would like the status quo to change in such a way that neurosurgeons and psychologists share the top rung and the

paramedics remain on the lower rung. This hierarchical structure also includes social workers, who like the paramedics fall below the psychologists in the hierarchy. In discussing how Psy 1 saw social workers and psychologists working together, she allocates counselling to the psychological arena, although adds "once they're involved [in the case], we let them do certain other things as well" (insertion and emphasis added).

Psy 2's view of the position of psychologists with respect to other health professionals is different from Psy 1's (and this will be discussed in more detail later), but in one respect is essentially very similar to that of Psy 1 : neurosurgeons are at the top of the hierarchy, and psychologists have less power, but other health professionals are even lower down on the professional ladder. For example, Psy 2 sees one of the aspects of a psychologist's job to be to coordinate the team and sees the work of the psychologist as being qualitatively different from that of the physiotherapist and occupational therapist, because of the "higher level" of psychological education and research skills, and the psychological contribution to diagnosis. In describing her understanding of the neurosurgeons' perception of psychologists, Psy 2 says "they would like us...to be providing them with services just in a kind of referral way. A little bit like 'be seen and not heard'...so there's a bit of a feeling of us being technicians". She then further tries to explain the way in which she believes psychologists are inappropriately perceived, by saying it is similar to the position physiotherapists have, implicitly constructing a professional hierarchy with physiotherapists below psychologists.

It therefore seems that the psychologists in Neurosurgery perceive the power relations and status quo in Neurosurgery unfavourably. However, they do not want to fundamentally change the inequitable power distribution with all the implications that this has for teamwork in Neurosurgery, but would like psychologists to be admitted to the Neurosurgery power-elite, and for the power distribution to remain unequal.

Power relationships in terms of gender

Feminist theory has been particularly concerned with the power relationships between men and women, and Firestone (1970) has argued that understanding these particular power relationships is fundamental to any discussion of power.

In addition, most neurosurgeons in Cape Town are men (there is only one female registrar in the Neurosurgery unit of this study) and both of the qualified clinical psychologists in Neurosurgery are women, although some of the interns are men. It might be expected then that gender-related power issues are part of the relationships between neurosurgeons and clinical psychologists in Neurosurgery. The professions themselves may be seen as having "masculine" or "feminine" aspects. For example, Psy 2 describes neurosurgery as "quick" and "action-oriented", both adjectives typically associated with the masculine stereotype (Bardwick & Douvan, 1971). The concerns of clinical psychology are similar in some ways with those of stereotyped femininity, namely the focus on nurturance, support, feelings, empathy and so on. Therefore it may be useful to examine the professional relationships in Neurosurgery from the perspective of gender. This is supported by Littlewood and Lipsedge's (1986) argument that biomedical conceptualisations of illness are closely tied to implicit cultural and political assumptions, particularly those concerning sex roles.

Understanding the professional relationship between neurosurgeons and psychologists as incorporating gender-related issues may help to explain the power distribution in Neurosurgery and how psychologists respond to it. For example, the marginality of the psychosocial to biomedicine has been discussed, and this may be strengthened by what Firestone has discussed as the patriarchal pattern of men at the centre and women at the periphery. In other words the marginality of the psychosocial is not only analogous to that of women, but is also reinforced and complemented by the marginality of women.

"Feminine" professions (feminine in the composition of their membership in this context, and in the concerns of the profession), such as clinical psychology, may tend to use stereotypically feminine strategies for change, focussing on individual change rather than attempting to fundamentally change the power structure. For example, in discussing the (unsatisfactory) position of psychologists in Health Maintenance Organisations, and their relationship with the medical profession, Tulkin and Frank (1985) conclude by suggesting that "individual professional relationships are valuable avenues for bringing about system changes" (p. 1129). It seems that the psychologists in Neurosurgery attempt to use similar stereotypically feminine strategies. While this may be understandable as a strategy of the powerless, it is unlikely to

fundamentally change the power structures. It has been suggested that it seems as if the psychologists in Neurosurgery would like to be admitted to the power-elite, without any fundamental change in the power distribution. This however may merely serve to reinforce the marginalisation of psychologists (as women), psychology (as a "feminine" profession), and psychosocial issues, as the present power distribution is rooted in the marginalisation of the psychosocial.

The function served by psychology in Neurosurgery may also be seen as stereotypically feminine in some ways. Dutton (1980) says that "things are often arranged for men so that the way is cleared for them to be able to get down to work. Up to now it has been the role of women to perform this clearing of the way by their servicing activities" (p. 131). In a similar way, psychologists may be seen as clearing the way for neurosurgeons so that they are able to get down to work. The service that psychologists provide for neurosurgeons includes for example, communicating with patients (as in Case 1), and allowing neurosurgeons to relate only to the biomedical aspects of patients. That psychologists are seen as providing a service for neurosurgeons (and other staff), rather than providing a service for patients, is supported by Doc 1's comment about psychologists working in Neurosurgery : "I think it's all been to the good, not only personally for the neurosurgeon". He then explains how important psychologists have been in helping junior nursing staff.

It seems that psychologists and neurosurgeons (and other staff) have collaborated in the construction of psychological work oriented towards serving staff needs rather than patient needs. Often serving staff and serving patients may coincide : for example, a psychodiagnostic assessment may be extremely valuable to both the surgeon and the patient. However there may be a subtle difference between orienting towards patients and towards staff. In the cases reported, the divergence of these two orientations may be seen, as might the resulting conflicts of interests.

Serving staff needs by acting as a communication-link, for example, is invisible, as is much of service and "women's work", thereby reducing the apparent value of psychological work. A health profession's value to a medical unit must to a large extent be determined by the concrete and visible service provided by the profession for patients. The service that psychologists provide is also that which is devalued by

neurosurgeons. For example, Psy 2 says that neurosurgeons are interested in the technical issues of surgical procedures : "they don't have hours to sit and discuss diagnostic issues, and that goes for their management in terms of the patient's general psychosocial wellbeing". Doc 1 comments that the neurosurgeon's priority is to deal with acute surgery. This suggests that psychologists deal with the aspects of patient management which are not prioritised by neurosurgeons.

The power held by neurosurgeons allows them to define acute surgery as important, and it is possible that psychologists facilitate this definition. Both professions are therefore implicated in devaluing the psychosocial, and this devaluation maintains the power of the neurosurgeons. Speaking of men, Spender (1985) says : "the authority they claim, this capacity to be the knowers in possession of the true view of the world, does much to enhance and reinforce their privileged position" (p. 88). This relates to Sullivan's (1986) description of the relationship between doctor as knower and patient as the known, suggesting a similar use of knowledge to maintain power.

Teamwork

Closely related to the issue of power distribution is the concept of teamwork. As mentioned previously, underlying the Lowe and Herranen (1981) model of teamwork is the belief in the equal value of each of the participants in the team, and the model emphasises open communication, shared leadership, decision-making and responsibility. They point out that teamwork cannot occur unless it is supported by the environment. It would seem, on the basis of the previous discussion, that these conditions are not met in Neurosurgery. Doc 1 understands teamwork to be necessary in Neurosurgery because of the overspecialisation that has occurred in the health professions and the resulting fragmentation of patient care. He believes the solution to be for all those who have fragmented the patient to come together to look at patients, so as to see patients as total entities and individuals. In particular, he sees psychologists as dealing with a dimension for which the neurosurgeons have not been trained, such as counselling head injured patients. This understanding of teamwork does not however make reference to the implicit power structures that already exist, which may sabotage teamwork unless explicitly addressed. Later in the interview Doc 1 elaborates on his view of teamwork, by saying, "it just means that people work together...you don't have to have a lot of meetings, you don't have to have a hierarchical structure...there is

no need to assert who is the leader at this moment". It seems that this formulation denies the importance of power relations, and this denial may be implicated in the potential failure of real teamwork. Doc 1's last comment on teamwork illustrates the team functioning in the way described by Shaw (1986), with each member contributing their specialized information, and one person integrating the information and making the decisions. He says "Just in the same way that I ask the physiotherapist, do you think I should discharge this patient, if they say 'no, doctor, just three more days, he's doing so well, I just want to get him quite steady on his own'. And I listen to them".

Psy 2's conception of teamwork also includes a team-leader who coordinates and integrates, but this team leader is a psychologist. For example, when asked about the part a psychologist could play in rehabilitation, Psy 2 spoke of assessment and recommendations, but also "the role as I see it quite often is as the leader of the team in rehabilitation". She adds "our skills are broader...we have our particular contribution to make in terms of that patient's status at the moment, intellectual or emotional, whereas the speech therapist, O.T.[occupational therapist], have their contribution to make, but we have an extra contribution to make, in that we are trained in group work, so we can coordinate the whole rehabilitation process...some people have that natural talent, but they're not trained in that skill to coordinate the whole group process, a very wide group process, or the whole team" (insertion added). While accepting that psychologists are trained in group work and therefore more skilled in dealing with group process than for instance, speech therapists, it might not be useful to conflate teamwork and group process, although of course group processes are part of teamwork. There seems to be a conflict between the psychologist acting as a therapist to the team and simultaneously attempting to be a member of that team, which has a purpose outside of itself, namely to provide a service to patients. Acting as a therapist to the team invests the psychologist with more power than other individual members of the team and as such would be antithetical to the team working as a group of equals. In addition the psychologist acting as a therapist to the team may not have been made explicit, and this raises ethical issues about consent.

Consultation and liaison

Considering the difficulties with teamwork in Neurosurgery, it may be more appropriate to conceptualise the work of a psychologist in Neurosurgery in terms of consultation and liaison, in that this model does not

require that everyone share equally in decision-making, responsibility and so on. In other words it is a model which may fit more easily with the realities of Neurosurgery at present, and the psychologists in Neurosurgery seem to be using this model at times to explain the way they work. For example, when the issue of hierarchies and authority was being discussed, with particular reference to giving orders, Psy 1 said that orders are not given, "they request and refer to us. We are consultants". Psy 2's conception of the psychologist's function as systems-manager and coordinator seems to fit more with the model of consultation-liaison work than with teamwork. She says that Hospital A "is like a factory...there are just so many patients and [the] neurosurgery discipline is an action-oriented, quick turnover [one]. There's a quick turnover of patients, there's a tremendous turnover of staff, so you actually need someone who can go in there and find things to do and make the links and sort of analyse the system, and then they can do a tremendous amount of good in liaising and helping to...smooth out issues, basically act as a systems manager, in terms of...difficulties that arise, the interpersonal difficulties between patients, staff. Or in terms of what they've been told and what they haven't been told, and who's telling who what" (insertions added). Psy 2's notion of how psychologists should function in Neurosurgery seems to contradict in some ways the concept of teamwork discussed earlier, but may be more compatible with the consultation-liaison framework.

Johnson distinguishes between the process of consultation and liaison activities in the following way :

> As a consultant, the psychiatrist is like any other specialist in the hospital with a specific area of expertise. Much as an internist requests a consultation from a radiologist when detailed information about a patient's internal anatomy is needed, the consultant psychiatrist is asked to examine patients and offer suggestions for treatment without necessarily providing ongoing care. Thus, consulting activities typically consist of brief interaction with patients and other specialists on a wide variety of clinical services in which psychiatrists evaluate and make recommendations for dealing with specific "patient problems".
> In contrast, in liaison activities the psychiatrist participates as an active member of the treatment team on a specific medical or surgical service, engaging in activities such as "bedside rounds", inservice training for staff, and collaborative research. Liaison activities also frequently involve coordinating "support groups" or "psychotherapy groups" for staff or for patients' families. Thus liaison activities are distinguished from consultation by the intensity of involvement with patients and other practitioners, and the increased collegiality between psychiatrists and other specialists which this involvement fosters. (Johnson, 1985, p. 270).

Consultants seem to be independent of the unit they consult to; they have the status of "any other specialist in the hospital with a specific area of expertise" and as such are not subject to the authority of the head of

the unit. They pay for this autonomy however, with restricted access to the units they consult to, requiring invitation into these units, and with the knowledge that their recommendations are not binding in any way. In many cases, consultants have to accept the consultee's delimitation of the problem and the boundaries of the request. "Liaisors", on the other hand, being part of the units they work in, are far more involved with the life of the unit. Therefore there is unlimited access to the unit; liaisors have their own perceptions of problems in the unit and may be more able to extend the boundaries of a request, or intervene without an explicit request to do so. Although liaisors cannot ensure that their recommendations are adhered to, it would seem more likely that they are, because of their continual presence in the unit, their relationships with consultees, and their greater involvement in the intervention recommended. In other words what liaisors sacrifice in autonomy and independent status as the "expert who is called in", they make up in efficacy due to their closer relationships with other staff members and their continual presence in the unit.

Psychologists in Neurosurgery seem to fall somewhere between consultation and liaison. As members of the unit's staff, they do not have the autonomy and status of independent experts or specialists called in to help. However, despite working full time in the unit, they do not have unlimited access to the unit. There is unlimited access to patients (Psy 1) but even this is hindered in practice by the lack of a coordinating meeting in which every new patient is discussed and made known to the psychologists (as discussed earlier). More importantly though, psychologists have not been given the brief to understand and deal with the problems they perceive in any way other than a patient-oriented one. Using a physician-oriented or situation-oriented approach could potentially result in a conflict between the psychologist's and other team members' understandings of problems (as in Case 1). In addition, psychologists' access to the unit is limited in that they may be seen as being marginalised, as discussed earlier.

The marginality of psychologists and psychosocial issues in Neurosurgery may be seen in Case 3, for example, where psychological knowledge is not fully integrated into patient care and planning. Besides presenting at two Neurosurgery Journal Clubs twice per year, psychologists in Neurosurgery do not formally teach neurosurgeons (Psy 1 and Psy 2). Psychological knowledge is conveyed informally via personal relationships and psychometric reports, and this may serve to maintain the marginality of psychological issues. Psychologists and psychosocial factors seem to be considered only when a problem

arises, as in the other cases discussed; there seems to be a lack of psychological involvement in general planning of patient care. The marginalisation of psychologists and the psychosocial is reinforced by the lack of a general coordinating meeting along the lines suggested by Psy 2 : "daily management meetings first thing in the morning, where new patients were presented, a slate was discussed for the day, or the next day; we could know that this patient is particularly anxious, they don't seem to understand what's going on or whatever, very quick discussion on the relevant patient at that moment, ones who have just come in or have gone to be operated on, and then the ones that are about to be discharged, so that management in all areas is coordinated. I think that...patient care would just dramatically improve". The lack of such coordination means that there is no explicit and orderly system for determining which patients should be seen, which may result in psychological services not being made available to all patients who need them (Psy 2). It is significant that no qualified neurosurgeons or even neurosurgery registrars attend the biweekly meetings at which most of the relevant psychosocial issues are discussed, indicating the lack of value of the psychosocial, as perceived by those with power in Neurosurgery. The fact that most referrals are verbal rather than written serves to increase the invisibility of psychological work and to diminish its importance (Johnson, 1985). It is interesting to note that both psychologists mentioned the failure to plan offices for them in the new space that the Neurosurgery unit will be moving into, and this may be an indication of their marginality.

In terms of the consultation-liaison model of practice, it seems that in Neurosurgery, psychologists do not really have the responsibility and involvement necessary for liaison activities, nor do they have the autonomy and status of consultants.

Shortage of psychologists

An issue raised by all of the interviewees is that of the shortage of psychologists. In response to a question about screening all patients for the subtle deficits consequent on head injury, Psy 1 said : "But then we need ten times the amount of psychologists". Responding to the issue of presurgery preparation, Psy 2 said : "At the moment the numbers are so vast and the turnover so quick that there's none of that on a routine basis. I mean if one would have to think of dealing properly with every patient in the ideal way, there'd be a hopeless shortage". Doc 1 comments that he would like more patients in particular diagnostic categories to

be seen by psychologists, for example all patients with back complaints. Because there are insufficient psychologists to see all patients, patients must be selected for psychological attention in some way. Doc 1 explains this selection as being on the basis of diagnosis, with for example, head injured patients receiving priority because of their numbers, and also occasionally on the basis of interest and education for the psychologists, for example, with patients who have rare dysfunctions. Doc 1 would like "anybody that complains" to be seen by a psychologist. Psy 1 explains the selection of patients for psychometric assessment as being on the basis of excluding factors; for example, she says: "when you've got a very simple, severely injured person with one of the black languages who, if they don't have any other language, we can't test". Psy 1 says that psychological resources are concentrated on the young, not older people for whom "reintegration in any case into society is going to be difficult". Psy 2 explains that the patients who see psychologists are those who "get clearly distressed...or their families are bothering them. Or a patient is extremely difficult". There does not seem to be a systematic attempt to deal with patients' psychological needs, and possibly there cannot be, given the present structure of psychological services and the number of psychologists available.

One solution might be to increase the number of psychologists working in Neurosurgery, but this is impractical, and may not address the problem adequately. Alternatively, it may be useful to examine the input psychologists give at present, and ways in which their services could be used more effectively. On the basis of the four cases discussed above, some observations can be made.

1. It seems that psychologists spend time doing things that could be equally well done by other health professionals in Neurosurgery, for example by nursing staff in Case 4, or by the registrar in Case 2.

2. It seems that psychologists spend time acting as a communication-link in a "split and disparate" team (Psy 2), as in Case 1, when the problem could have been directly dealt with by the doctors involved with the difficult patient.

3. Psychologists spend very little time educating other staff members about psychosocial issues, as noted in the discussion of Case 3.

4. It seems that psychologists spend time filling in the cracks in the team, coordinating and so on, which are responses to problems in the way treatment is structured in Neurosurgery; these could perhaps be addressed in a different way (Case 1 and Case 4).

Given that the number of psychologists is limited, and that the potential workload is enormous, it might be that psychologists should be considering ways in which their skills and resources can be utilized so as to benefit more patients. On the basis of the observations above, it might be suggested that psychologists examine the ways in which their energy is being diffused by the present structures in Neurosurgery, and look at defining the psychological function in a way that works towards "centralising" or demarginalising psychosocial concerns. This will be discussed further in the conclusion.

Definition of functions

This raises the issue of the definition of psychological functions : who has the power to define these functions, and whether definition should happen from the inside or the outside. In some ways, in Neurosurgery, psychological aims are defined from the outside : for example, when Psy 1 was asked whether rehabilitation is part of the psychological service offered at Neurosurgery, she replied that "active rehabilitation, it's not done here, it's an acute unit, it's not a long-term unit". The psychologist's function is therefore limited by the unit's function. In Neurosurgery it seems that the aims of the unit are defined by the neurosurgeons, and Psy 1 seems to support this definition of the unit as a whole. The concept of recovery may be very different for different professions: for example, neurosurgically speaking, recovery may imply medical fitness and consciousness, whereas a neuropsychological approach may require in addition to this some measure of restored intellectual and emotional functioning. Neurosurgeons contribute to the definition of psychological work by the kinds of referrals they make; this contribution may be extremely powerful if psychologists respond to these referrals without first defining psychological functions, and then examining these referrals against this definition. Pressure to accept referrals without critically examining them exists because of the unequal power distribution, and because of the reactive psychological function of facilitating neurosurgical work.

The question of who defines psychological work is connected to the larger one of who defines the aims of the unit and both are rooted in the power structures of the unit discussed earlier. Definition of functions from the inside may help to change the power structures, whereas definition of functions from the outside, in a reactive way, may serve to maintain the status quo. Even within the present power structures it seems possible for psychologists to define their own work rather than only responding to external pressures. For

example, Psy 2 describes the "dramatic expansion" of her job from being one of assessment and counselling to including much more teaching and supervisory work, which she attributes to her own "pushing" the job in the direction of her interests. Doc 1 seems to support the definition of psychologists' jobs from the inside. He says : "They came into an existing department, where things were done without them, and they now had to find their way to do the very things they could do, they wanted to do...Once one accepts a person of quality, one...allows greater freedom...I think that different people have different specialties and basic training and things that they can do and want to do. This is what one wants".

CONCLUSION AND RECOMMENDATIONS

Issues arising out of the cases reported have been discussed, and it has been suggested that it is useful to understand psychological work in Neurosurgery in terms of professional power relations and power structures in Neurosurgery. This has implications for psychologists working as team members or doing consultation-liaison work. It has also been suggested that the position occupied by psychologists and psychology in the Neurosurgery power structure is marginal and some of the consequences of this marginality were described. An issue raised by all three interviewees was that of the shortage of psychologists, and this shortage was linked to the previously mentioned issues and suggested to be partly a result of a reactive rather than a proactive definition of psychological aims and work in Neurosurgery. Given the limited resources and potentially enormous work load, it was suggested that psychologists examine how best to utilize their skills.

Clinical psychologists have not been working in Neurosurgery for long, and by necessity, much of the work they do has had to be reactive, as they attempted to find a place for themselves in Neurosurgery. At present however, with the benefit of experience, it may be appropriate to evaluate the task psychologists have set for themselves, and to consider new strategies for contributing to patient care. The following suggestions would consolidate and extend the gains that have already been made in dealing with the psychosocial needs of Neurosurgery patients. It would seem, on the basis of the previous discussion, that it would be particularly useful for all health professionals in Neurosurgery, together with the psychologists, to

evaluate the problems and successes of patient care in Neurosurgery, and to plan strategies for dealing with the problems. It would be important for all health professionals to be part of this discussion if fragmentation and possibly marginalisation of the psychosocial is to be avoided. By dealing with problems case by case, as presently seems to be the situation, some cases may be missed, and the problem may never be conceptualised as a problem, thereby preventing it from being recognized and dealt with.

Fundamental to such a project of evaluation would be recognition of the inequitable distribution of power at present, and a willingness to change the status quo where it hinders patient care. This is not to suggest necessarily that there be a radical change in the power structure resulting in, for example, absolute equality of team members with regard to "shared leadership, decision-making and responsibility" (Lowe and Herranen, 1982). It may be possible to work satisfactorily within the present power structures, if they are acknowledged and taken into account; teamwork, for example, as conceived of above, may not be possible within the present power structures, making it necessary to consider other ways of working which fit with the realities of Neurosurgery. If the power structures are acknowledged and explicitly discussed, it may also become possible to negotiate to change them where necessary.

Also necessary to such a project of evaluation would be proactive definition of psychological aims by the psychologists themselves, based on their experience of working in Neurosurgery, and their knowledge of the skills and resources they can offer. As an alternative to responding on a case by case basis to referrals, it would be extremely useful if psychologists were to critically examine the kinds of cases referred (and not referred) to them, define which kinds of cases they would like to be dealing with, and then to work out ways of gaining access to all of these cases. It would also be useful for psychologists to define the ways in which they will intervene in problems. For example, a problem may be defined as some patients are insufficiently prepared for surgery. One solution might be for psychologists to attempt to find out, on an individual, case by case basis, which patients have not been sufficiently prepared and to take on the task of preparing them. An alternative solution might be for psychologists to educate doctors about the psychological importance of pre-surgery preparation for all patients, leaving the doctor to take on this task, as he or she is technically best qualified for the task. The first solution adds to the strain on limited psychological resources, and makes it likely that some patients will be neglected. The second solution may require an initial investment

of time and effort, but is likely to result in a more systematic and accurate service. Both of these solutions are simplistic and do not take into account all of the relevant factors; the point being made, however, is that there are different ways of dealing with problems, and psychologists need to choose the most effective and efficient. Proactive definition of the psychological function may also help prevent referrals being made that could be competently and sometimes more appropriately dealt with by other staff members.

Psy 2 has suggested that coordination of patient care be improved by instituting a coordinating meeting, which was described earlier, and this suggestion needs to be carefully considered by all professionals working in Neurosurgery. Because psychological resources are limited it might be useful to train nursing staff, for example, to deal with some of the problems that are now referred to psychologists, and to refer to psychologists only when necessary. It seems that it would be very useful to educate all of the Neurosurgery staff about what psychologists can do, and when cases should be referred to psychologists. Because of the many different functions that psychologists in Neurosurgery fulfil, it has been suggested that there is sometimes a conflict of interests. There are two qualified psychologists who do clinical work in Neurosurgery, and it therefore might be useful to divide the work between them according to function. For example, one psychologist could work as a team member, dealing with everyday patient problems, and the other psychologist could remain at a distance from the everyday problems and act as a consultant to the team, being more involved perhaps with staff support, staff education and particularly difficult problems.

Prescriptive and detailed suggestions would be inappropriate, as it is the psychologists working in Neurosurgery who are best able to assess the needs of the unit and their own capabilities. The above suggestions are therefore necessarily imprecise; it is intended rather that the issues which have been raised contribute to a critical but constructive examination of the function of psychology in Neurosurgery, by psychologists and others working in Neurosurgery. This might require a substantial amount of work initially for all concerned, but in the longer term might be expected to coordinate and improve the care offered to patients, relieving psychologists (and other staff) of some of their presently time-consuming tasks. Psychologists in particular might then be able to develop new and exciting projects, for example in the area of rehabilitation, and do more neuropsychological research.

This study might usefully be extended by analysing all referrals made to psychologists within a given time period. This would allow an estimate of the proportion of the total made up by cases such as those selected for discussion in this study. It would also be useful to examine the total number of referrals in terms of the issues which have been raised in this dissertation, as some of these issues (for example, professional power relationships) might be expected to be relevant to all psychological work in Neurosurgery. Further insight might be gained by examining the work of clinical psychologists in other non-psychiatric wards, in order to make generalisations more possible. On the basis of the data gathered in this study, generalisation and conclusion have often not been possible, but interpretations and understandings of the work of clinical psychologists in general hospital settings have been suggested. It is hoped that these suggestions prove useful in clarifying clinical work in such settings, and enhancing the clinical psychological contribution to health care.

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