Stress Management for Primary Health Care Professionals

Usha R. Rout and Jaya K. Rout

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Dedication

This book is dedicated to our beloved son Tony and daughter Natalie.

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Foreword

Expectations of public services in the UK are rising – both from the government and from the public themselves. At the same time, the professions providing those services are expected to be more accountable for the care they give. These factors are contributing to a major increase in work stress experienced by those working in the public sector across a whole range of occupational groups.

General practitioners and their teams feel this stress very acutely. On one side the professions themselves recognise the need to improve and guarantee standards of care. On the other, the government argues for better access to already stretched primary care services. Doctors are increasingly held to account, through the establishment of health authority performance panels, through visits from the Commission for Health Improvement, and from the watchful eye of the National Clinical Assessment Authority. It's no wonder they feel stressed.

Building on years of work in this field, Usha and Jaya Rout have provided some ways forward for a stretched and stressed profession. After chapters which explain how stress arises at work, and the consequences that stress brings with it, they identify strategies for dealing with stress at both individual and practice level.

This book is exceptionally timely, and will provide a way forward for many general practitioners and their teams, and allow them to move out of the vicious spiral that stress often produces.

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Preface

The National Health Service (NHS) is undergoing enormous change, which has lead to many primary health care professionals experiencing pressure beyond their control and ability to cope. Primary care in Britain has taken on a new shape due to these changes and the members of the primary health care team are having to take additional responsibilities and working under tremendous pressure. Therefore, it is important to identify the sources of stress and find ways of dealing with them.

Although there are a number of books on stress in other professions, there is no general book on stress and methods of coping in primary care. We believe that this book is timely in the context of the NHS change, and the impact of this change on the primary health care professional. This is the first book to examine stress in primary care professionals. It is aimed at primary health care professionals, students in medicine, nursing, social sciences and allied health professions. Also, it can be of value to the researchers working in this area. We hope that this book will provide an overview of stress among primary health care professionals as well as a stimulus for further research in this important area.

This book is the product of our work, over the years, on primary health care professionals: general practitioners, practice managers, practice nurses, receptionists, health visitors, district nurses and community psychiatric nurses. We have organised this book in 9 chapters. Chapter 1 briefly describes the history and background to the NHS in Britain, its structure, function, changes and reforms. It also mentions important roles of some of the members of the primary care team. In Chapter 2 the concept of stress is defined. Chapter 3 gives a general overview of occupational stress literature. In Chapter 4 we discussed individual differences and other conditioning variables as these influence the experiences of occupational stress. In

Chapter 5 we have considered the consequences of stress in terms of cost to the individual and organisation. Although a brief literature review on stress in primary health care professionals is included in Chapter 6, more emphasis is given on our studies. Chapters 7 and 8 describe individual and organisational stress management strategies respectively that the primary health care professionals my find useful. The final chapter briefly mentions resources and training.

Usha Rout and Jaya Rout

Acknowledgements

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Commonly Used Abbreviations

(BMA) British Medical Association
(CHD) Coronary Heart Disease
(CPN) Community Psychiatric Nurse
(DoH) Department of Health
(ECG) Electro Cardio Graph
(FHSA) Family Health Services Authority
(GMC) General Medical Council
(GP) General Practitioner
(LMC) Local Medical Committee
(MDU) Medical Defence Union
(NASS) National Association of Staff Support
(NHS) National Health Service
(RCGP) Royal College of General Practitioners

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Chapter 1

INTRODUCTION AND BACKGROUND

This chapter describes the history of the National Health Service (NHS) in Britain, its structure, function, changes and reforms, and the primary health care in Britain. It describes briefly some of the important members of the primary health care team and their role in the organisation. This will help the readers who are not familiar with the primary health care set up in Britain.

The foundation of organised health service in the UK can be traced back to the 19th century when 'sick clubs' were formed to help pre-paid insurance for the poor. The National Insurance Act of 1911 allowed prepaid insurance for workers below a certain income. These workers could register with a General Practitioner (GP) who would receive payment for providing primary care. This system was restricted to the workers only and excluded their families and other relatives.

The plan to establish a National Health Service in Britain was introduced by the NHS Act of 1946 and the NHS itself was established in 1948. The NHS provided free health care services to the whole population, funded through taxation. Every individual was able to register with a GP of his or her choice to receive all necessary care. It was believed that the Act would create an atmosphere of greater security all over the country for the families faced by anxiety and the distress of illness (Owen, 1976). This year marks the 54th anniversary of the NHS establishment.

The NHS was created with three components: A General Medical Service (predominantly General Practice), a National Hospital Service and a Public Health Service. General practice played the most important role in providing primary health care by GPs and other primary care professionals. The primary care was and now is the largest component of the NHS and has carried the heaviest part of the workload since 1948. The hospital service was to provide secondary health care by specialists (consultants) in different

specialities and hospital nurses. The health service was meant for health promotion and disease prevention provided by the community care physicians and health visitors.

General practitioners were contracted to the NHS for providing primary care to their patients and to date have maintained their status as independent contractors. Over 90 per cent of all episodes of illness are managed in general practice (Fry, 1959). The trend towards larger practices has accelerated in recent years and single-handed practices are less common. The situation is changing rapidly with increasing proportions of non-principals in general practice. Primary care has progressed speedily over the years involving several other members, i.e. Practice Nurses, Health Visitors, District Nurses, Practice Receptionists, Community Midwives and Managers, all being actively involved in providing primary care. Other health professionals associated with GP practices are Community Psychiatric Nurses (CPNs), Social Workers, Counsellors, Speech Therapists and Chiropodists. The importance of multidisciplinary teamwork has been emphasised now. The British system of primary care is envied throughout the world.

1. CHANGES IN GENERAL PRACTICE

General practitioners were in private practice before the NHS Act, 1946. They were hesitant to join the NHS as they could see that their private practice would disappear. However, within a month 18 000 GPs joined the scheme (Lancet, 1948). Almost half of these were single handed and mainly practised from their own homes. There was uneven distribution of doctors. Their pay was determined by the number of patients registered with them. A patients' guide by the Ministry of Health in 1948 stated that every individual could register with a GP and it was the GP who would "arrange for the patient every kind of specialist care he himself is unable to give. Except in emergency, hospitals and specialists would not normally accept a patient for advice or treatment unless he has been sent by his family doctor" (Ministry of Health, 1948). The decision of admission to the hospital was transferred from the patients to the GPs. This 'gate keeper role' of the GPs made a demarcation between the primary care and secondary care.

Unlike hospital doctors, GPs in the early years of the NHS were working in isolation from other medical specialities and had no career structure. Technological advancement enhanced the status of hospital medicine and medical posts in hospitals were considered prestigious. The teaching hospitals gave little priority to undergraduate and postgraduate teaching for general practice. Moran (1958) commented that those doctors who entered general practice had fallen off the ladder of success in hospital medicine.

The morale among GPs was very low apart from the few who had successful practices in affluent areas, especially those who had access to cottage hospitals where they admitted and treated their patients. There was a significant amendment to the general practitioners' terms and conditions in 1966 (known as the GP Charter) to boost their morale. GPs finally got their act together in defining general practice as a specialist area of medicine and demanded appropriate recognition for this. GPs were allowed to reimburse 70% of their staff salaries and were paid rent on their premises. This also gave GPs a greater stake in community care. The college of General Practitioners (later became known as the Royal College of General Practitioners in 1967) was established in 1952. The college was one of the major contributions to the NHS development and has raised the standing and improved the training of GPs. In 1974 the NHS was re-organised to bring GPs and consultants into cooperation and understanding, with consequent benefit to patients. During Margaret Thatcher's era it was strongly believed by the Conservative government that the NHS, as a state monopolistic enterprise, was inefficient. In January 1988, the Prime Minister, Margaret Thatcher, announced a review of the NHS during a television interview on the BBC Panorama programme (Baggott, 1994). The Thatcher philosophy held the view that efficiency in the NHS could be improved, not by increased funding, but by encouraging competition between providers at both hospital and general practice level. A series of steps were taken to impose management structures at every level of the NHS to stimulate competition through the creation of an internal market.

1.1 The 1990 Contract for General Practitioners

'The new contract' (contract for GPs) in 1990 has been the most radical and far reaching of all changes. These changes were imposed on GPs against the wishes of the majority. The government had hoped to achieve efficiency at the level of general practice through encouraging competition, by bringing radical changes in the contract for GPs, and also introducing fundholding, a scheme whereby GP groups with more than 11 000 registered patients (later reduced to 7500 and then to 5000) could hold their own budgets for their patient care and purchase other services from community and hospital healthcare providers. The aim was to involve GPs in shaping Local Health Services, by acting as agents for their patients, using their own budgets to bring about the improvements in quality and efficiency in health services (Working for Patients, London, HMSO, 1989). The system of fundholding was implemented in April 1991. Many GPs joined fundholding and were determined to keep their own budget (Rivett, 1998). Fundholding GPs were allocated money on the basis of their historic expenditure. They used it for

prescribing medicine, practice staff and hospital services such as laboratory tests, outpatient appointments and operations. Fundholders often obtained better services for their patients. The GPs were purchasers on behalf of the patients. In this way allocated resources could be planned according to identified needs for patient care.

The 'new contract' required GPs to provide information to their Family Health Services Authorities (FHSAs), an annual report on their activities, their arrangements for seeing patients, and their hours of availability. In addition, they were also required to provide information on their disease prevention activities, i.e. child immunisation, cervical smear and screening of people above the age of 75 to assess their health status. Their remuneration was partly determined by these activities but capitation remained an important element. Targets were set for child immunisation and cervical smears. The government, set a policy of a 'carrot and a stick'. Doctors who failed to achieve set targets received minimum payment and those who managed to achieve the targets were financially rewarded. There was financial incentive to establish various health promotion clinics (e.g. well woman, blood pressure screening, well person, smoking cessation, weight reduction clinics) that encouraged GPs to employ practice nurses and additional ancillary staff. This arrangement was later withdrawn leaving several GPs with additional staff and high expenditure. Several unofficial schemes emerged as an alternative to fundholding by non-fundholding GPs who were sceptical of fundholding but wanted to reshape the Local Health Services (Black, Birchall and Trimble 1994; Graffy and Williams, 1994). These schemes were initially known as GP commissioning, initiated by non-fundholding GPs. Later, they were called Locality Commissioning but comprised both fundholding and non-fundholding GPs. It was a process of identifying the health needs of a population and prioritising the services required to meet these needs. Basically the role of Locality Commissioning was planning local services. It was widely viewed that the decisions were taken by the Health Authorities and the commissioners simply rubber-stamped it. Other changes that had implications for GPs' workload was the Community Care Act (to move care away from hospital settings towards care in the community). These changes made a significant impact on GPs work pattern, independence and job satisfaction.

During the 1990s, in the patients' charter, patients were encouraged to be consumers to exercise choice about care offered to them and to complain if their expectations were not met. This gave rise to increasing demands on the primary care sector of the NHS for diagnosis and treatment. Now primary care professionals are required to demonstrate the effectiveness of their services. This new emphasis on demonstrating quality puts pressure on GPs

whose main emphasis is clinical and are not well-versed with additional demands that are integral to management which is required from them.

The changes have made a significant impact on GPs' work patterns, independence and job satisfaction (Rout and Rout, 1993, 1994). GPs' workload has increased significantly especially in the area of practice administration. The introduction of fundholding and the emergence of market forces turned general practice into businesses. GPs were expected to work in a multidisciplinary team and had to be more accountable for the way in which they spent taxpayers' money. For decades, medicine in the health care system has enjoyed a superior and dominant position and other health care professionals have been working under medical direction and instructions. The profession has no longer the same respect and prestige as in the past and the potential for satisfaction may have been eroded (Sutherland and Cooper, 1992). GPs have been going through a lot of stress and strain in balancing their professional role with these new demands.

They have suffered greater restriction to their autonomy following the changes in the NHS compared to other professionals such as the legal profession (Brazier *et al.*, 1993). Morale within the primary care sector was at an all time low (BMJ, 1991; Holton and Hastie, 1991). The challenge to the medical profession is not only confined to the UK, but also to many other countries (Moran and Wood, 1992; Godt, 1987; Wilsford, 1991).

The Labour party while in opposition criticised the government policy of fundholding and vowed to scrap the system if it came to power. It argued that the fundholding created a two-tier system for the patients. Patients of fundholding practices had preferential treatment. The fundholding scheme has proved bureaucratic and costly. The Labour party (New Labour) won the election in May 1997, formed the government and implemented their ,own policy to reform the health service in new directions. Fundholding was scrapped in 1999 and Primary Care Groups (PCGs) were formed.

1.2 Primary Care Groups

Primary Care Groups comprise all GPs in an area together with community nurses who take responsibility for commissioning services for the local community. The aim of the PCGs is to ensure primary medical services that are responsive and appropriate to the local health needs. The decisions on these issues are taken by the PCG Board, which consists of seven GPs, elected via the Local Medical Committee (LMC), two nurses, one social services representative, one lay member, one non-executive member of the Health Authority and one executive member. Primary Care Groups work on four different levels. The levels can vary from giving advice to the Health Authority to handling funds in purchasing health care for the

patient population. The progression to higher levels is by choice with the option of becoming trusts. PCG Boards meet in public offering the public a unique opportunity to influence the primary care professionals. The professional majority in the group ensures that the PCG is led by a majority of doctors and nurses. Each GP member in the PCG is given the 'lead role' on a particular area such as coronary heart disease (CHD), diabetes, or asthma, and they are responsible for developing guidelines and policy issues on their respective fields. The group meet at regular intervals to discuss relevant issues and advise the executive to implement the policies. All PCGs are accountable to Health Authorities but have the freedom to make decisions about how they deploy their resources within the framework of the health improvement programme.

1.3 Primary Care Trusts (PCT)

The Labour government would like to see every PCG develop and acquire the strength and Capability to achieve trust status if it would like to do so. There is no pressure from the Department of Health to become a trust and the decision has to be taken at the local level. Primary Care Trusts are managed by a board of GPs (drawn from the practices involved), community nurses, managers, and include social services and lay members. The Trust would hold the resources for General Medical Services allocations, hospital and community health services and prescriptions. Primary Care Trust Boards comprise 11 members with a lay-chair and five non-Executive members appointed by the Secretary of State. There are three professional Executive Committee members with a minimum of one nurse and therefore a maximum of two GPs. The Board has a lay member. It is believed that the PCTs will have the control of over 80% of healthcare expenses for providing services to the local population and will have additional powers to provide community services (BMJ, 2000). The General Practitioners Committee (GPC) believes that the individual GP's workload may change a little but there is likely to be increased clinical accountability. It is viewed that under the PCT guidance the practices may become larger to form association or federations evolving into publicly funded health maintenance organisations (BMJ 2000). Under the influence of PCTs small practices may be pressurised to amalgamate. Some practices may choose to move to PCT own premises for better surgery facilities. Perhaps larger teams of multiskilled professionals will deliver primary care in the future.

1.4 Personal Medical Services (PMS)

Personal Medical Services (PMS) were designed as an experimental scheme in 1998 to explore alternative ways of delivering primary and community care. General practitioners are independent contractors contracted to the NHS. The general medical services (GMS) regulations are set out in the 'Red Book', which is perceived as inflexible and complicated. PMS allow GPs to negotiate contractual arrangements with the Health Authorities, which would have been considered unacceptable and illegal under the normal arrangements. PMS allow GPs to work on a salaried, full or part time basis. It is expected that by April 2002 nearly a third of all GPs will be joining PMS contracts. PMS pays GPs on the basis of meeting set quality standards and the particular needs of the local population. Although PMS is sometimes seen as a salaried doctor scheme, it has allowed a whole range of salaried and self-employed models. The first and second wave of GPs entering PMS enjoyed the freedom but as increasing numbers enter the scheme, discrepancies appear in service delivery, payment and continuing professional development. Third wave doctors entering the scheme find that the contract is rather becoming 'regulated' (BMJ, 2000). Important issues like superannuation have yet to be negotiated before the scheme becomes popular amongst a large number of GPs who haven't yet been attracted to PMS.

2. PRIMARY HEALTH CARE TEAM

Primary health care in Britain is provided through general practice, free of charge to all its residents irrespective of means or status. GPs are at the forefront of the NHS. They are the cornerstone of its success and provide effective health care to the vast majority of the nation's population, but this would not have been possible without the help and cooperation of other members of the primary health care team (PHCT).

The concept of teamwork in the NHS has been in existence since 1950. The initiative for such an innovative structure was first taken up in Hampshire and Oxfordshire regions, and was initiated by establishing an experimental relationship between selected GPs and health visitors (Swift, 1964; Warrin, 1968). This movement expanded to other counties by the 1960s and included district nurses and midwives. As a result, the district nurses were able to change their work pattern and could cross geographical boundaries to follow up patients. The relationship between the GPs and the district nurses in the early stages was unclear. Various terms like liaison, cooperation, and alignment were used which symbolised varying degrees of

relationship with GPs and their role commitment to the practices they were attached to. The term 'attachment' started to appear in academic journals during the mid 60s. By this time the health visitors were attached to GP practices. As a result of these changes the health authorities and GPs were encouraged to form primary health care teams. A primary health care team consists of a group of people who contribute their expertise and share each other's views towards achieving a common goal. McIntosh (1974) defined a team as: 'a group of people with diverse but related knowledge and skills who associate for the purpose of directing, coordinating and developing the separate parts, as well as the sum total of their expertise in order to create new and maximise existing opportunities for achieving their common goal'. The major incentive to set up multidisciplinary teams was the introduction of a policy, in 1960s allowing GPs to reimburse 70% of the costs of employing nurses. This fuelled growth in practice nurses. Expanding team size was helped through provision of health centres by Health Authorities which allowed bigger teams to be accommodated together under one roof. By far the biggest boost to multidisciplinary teams, however, was the 1990 GP contract which enabled GPs to buy community nursing and other services and place those services in the practice.

The GP should not automatically presume to be the leader, as he does not receive training in leadership. The team leader needs to have skills to coordinate, set priorities, define goals, and communicate effectively with other members of the team. However, general practice training in areas of health maintenance, ill health prevention, diagnosis and treatment of diseases, and rehabilitation may favour him to lead the team. The GP needs to coordinate and direct other team members for a course of action but should not transfer his responsibility for patient care. It is desirable for the members to meet at regular intervals to share their experiences and views on particular issues and to come to an agreed course of action for individual patients.

3. WHO FORMS THE TEAM?

The concept of the primary health care team was fragile in the early years and did not specify who should be included in the team and in what capacity. The Harvard Davis Report (1971) favoured the basic unit of one doctor, nurse and secretarial staff to provide continuing care for a defined population. Practically anyone who has something to do with patients in the community could be included in the team, but the following members have been usually recognised as members of the PHCT: doctor, practice manager, practice reception staff, practice nurse, district nurse, community midwife,

health visitor, community psychiatric nurse, and social worker (see Figure 1.1). In addition, other staff, such as a physiotherapist, psychologist, counsellor, pharmacist, and chiropodist may attend a health centre for certain sessions.

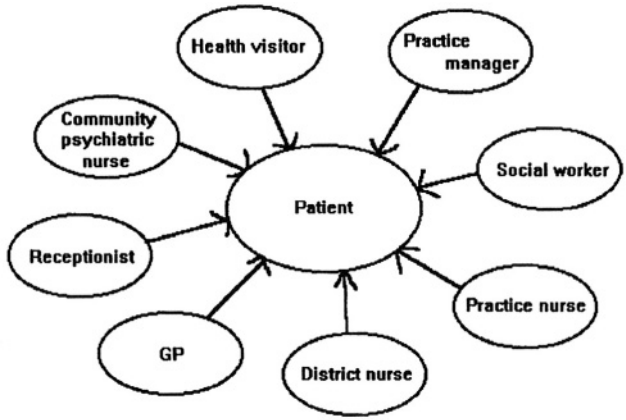

Figure 1.1. Primary health-care team working for the patient.

4. ROLE OF EACH PRIMARY CARE MEMBER

4.1 General Practitioner

The definition agreed by the Leeuwenhurst group (1974) of the GP's job is:

"The GP is a licensed medical graduate who gives personal, primary and continuing care to individuals, families and practice population irrespective of age, sex and illness. It is the synthesis of these functions, which is unique. He will attend his patients in his consulting room and in their homes and sometimes in a clinic or hospital. His aim is to make early diagnosis. He will include and integrate physical, psychological and social factors in his consideration about health and illness.... He will make an initial decision about every problem presented to him as a doctor. He will undertake continuing management of patients with chronic, recurrent or terminal illnesses..... He will practice in cooperation with other colleagues, medical and non-medical".

GPs may either practice single-handed or in groups, working either in health centres, purpose built or. converted premises. The general practice charter in 1966 gave financial incentives to GPs to form group practices, improve or build premises and employ nurses and reception staff. GPs are considered as self employed but get their remuneration from the government according to their list size and item of services they provide. They are contracted to the Family Health Services Authorities (FHSAs), (now known as Health Authorities) to provide continuing medical care to the patients registered with them. GPs are the only members in the primary health care team to have obtained training and experience in diagnosis and treatment, illness prevention and health maintenance. The role of the GP has expanded to respond to the needs and demands of the population. These roles include prevention and screening. The successes of achieving these roles are augmented by the professional contributions made by the other members of the primary health care professionals. Figure 1.2 illustrates the role of the GP.

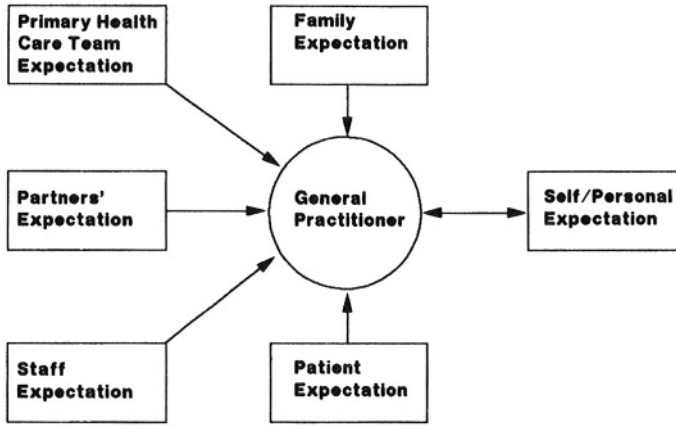

Figure 1.2. The central role of the general practitioner.

4.2 Practice Manager

General practice in the past has been based on providing professional primary care to patients, but in recent years there has been a shift in this trend towards the market economy. Senior receptionists mostly managed the administrative aspects of practices in the past. The practice manager, in general practice, is traditionally a senior receptionist, who has been promoted into a new role which organises the practice and takes

administrative responsibility, leaving the GPs to do their clinical job. Also a growing number of practice managers are professional managers brought in from other sectors of the economy. The increase in administrative workload, following the introduction of the 1990 contract has made it a necessity for GPs to employ practice managers to take on the ever increasing administrative workload. As a result, the number of practice managers employed by GPs has increased significantly which may reflect the swift change in the structure of general practice into business types. There has been no rigid requirement of qualification/s for practice managers, but recently they are being required to obtain a diploma in practice management at courses available in technical colleges and universities.

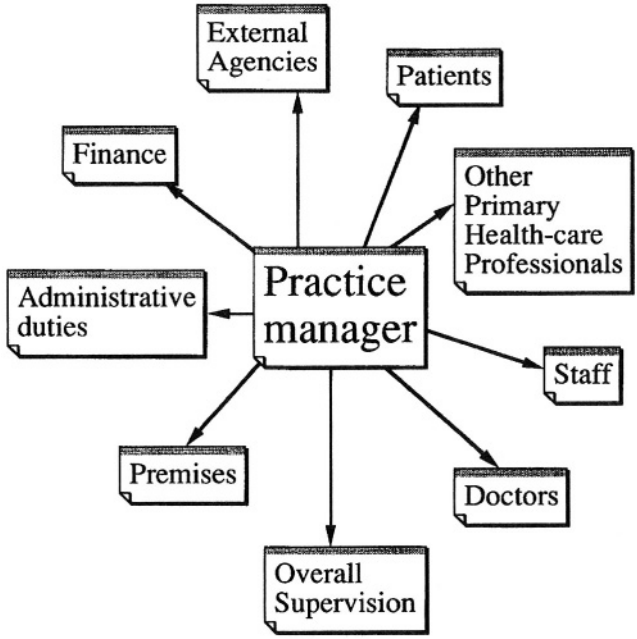

Figure 1.3. Role of the practice manager

The practice manager's role is to appoint, manage and supervise ancillary staff, organise doctor's surgeries and other clinics, organise the rota, take responsibility for the staff pay-roll, liaise with other primary health care professionals and ensure that the standard and security of the work place remains satisfactory (Figure 1.3). Some managers are given the responsibility for the practice finance including practice expenses and doctors' drawings. In a small number of instances some working or retired

doctors have designated themselves as practice directors where they do little or no clinical work but focus upon practice management.

4.3 Practice Receptionist

The importance of the role of the reception staff cannot be over emphasised. Invariably they are the first members in the doctor's surgery whom the patients contact. Therefore, they should have training and experience to determine priorities and take appropriate action. While it is mandatory for doctors to acquire further training to become GPs the practice receptionists apparently require little or no training at all. The role of the receptionist may vary from one practice to the other but there are basic duties common to all. They do act as an intermediary between the patient and the doctor. They need to have a pleasant personality to be able to welcome the patients and have sufficient knowledge to provide necessary information to the patients. It is perceived that their personal qualities are valued more than their educational qualification (Williams, 1979). The main tasks performed by receptionists are answering the telephone, receiving

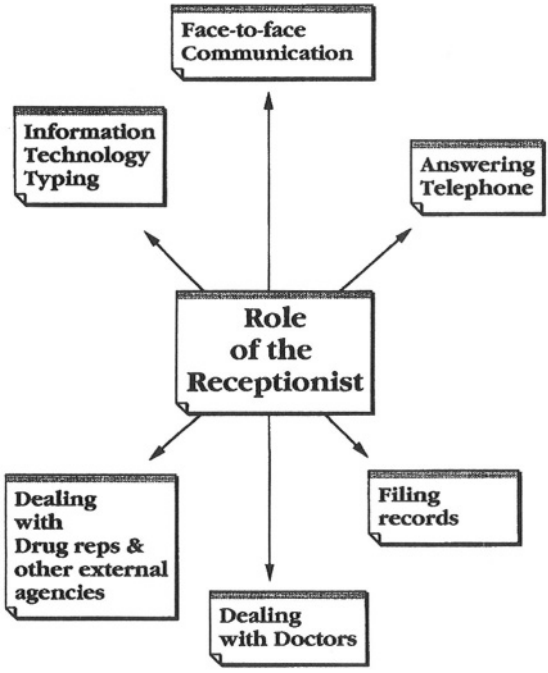

Figure 1.4 Role of the Receptionist

patients, booking appointments, receiving requests for repeat prescriptions and home visits, handing prescriptions over to patients, typing letters, dealing with drug representatives and other external agencies, filing records, and many more (Figure 1.4).

4.4 Practice Nurse

The practice nurse is a registered general nurse (RGN) who is employed by GPs to work within the practice team, and is responsible for the clinical nursing care of the practice population together with the district nursing team (Steering Group, Royal College of Nursing, 1984). The practice nurse's role has been growing since the general practice charter of 1966. There have been major changes in general practice following the introduction of the 1990 contract for GPs with an emphasis on health promotion. As a result GPs have been encouraged to set up health promotion clinics in their surgeries often run by their practice nurse/s. In a study, Hibble (1995), comparing practice nurse workload before and after the introduction of the 1990 contract for GPs, found that the number of practice nurses in each practice had increased from 0.7 full time equivalents in 1989 to 1.2 in 1992 and the proportion of time spent on administration had increased to 19%. In 1990 there were in excess of 4000 practice nurses in England (Robinson, 1990) and this figure was increased significantly to 9000 in 1994 (Rivett, 1998). General practitioners employ practice nurses for specific tasks which health authority staff may be unable to undertake (Br J Gen Pract, April 1990). Practice nurses are accountable to the GPs by whom they are employed. They are an integral part of the primary health care team. Practice nurse roles have been extended into the area of routine chronic disease management; they run the asthma, diabetes and heart disease clinics.

There are a wide range of activities undertaken by practice nurses including prevention, therapeutic activities, and education. Some of the common activities undertaken are as follows: baby immunisation, travel immunisation, general injections (such as Depo-Provera contraceptive, vitamin B_{12}, iron), hypertension clinic, diabetic clinic, asthma clinic, well woman clinic, well person clinic (for men and women), contraceptive advice, electro-cardiogram (ECG) recording, cervical smear tests, wound dressing, ear syringing, suturing, taking blood samples for investigations, assisting doctors with minor surgery, smoking cessation advice, completing claim forms for item of service, home visits as requested by doctors, training student nurses, record keeping, entering data into computers, and liasing with other health care professionals (Figure 1.5).

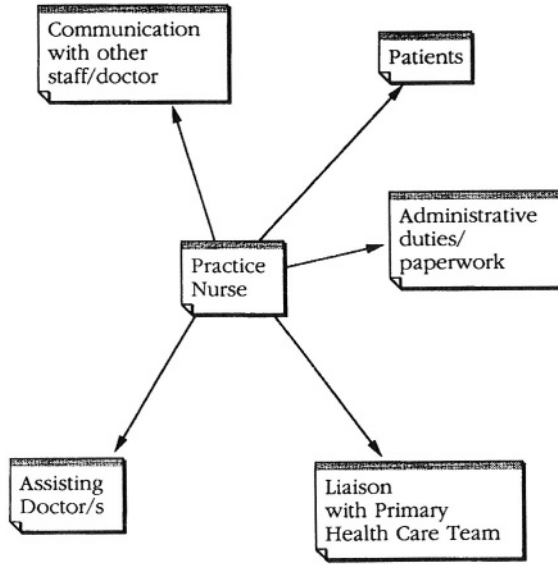

Figure 1.5. Role of the practice nurse

4.5 District Nurse

The concept of district nursing started in 1859 in Liverpool and was initiated by a philanthropist, William Rathbone. Since the formation of the NHS in 1948, the Local Health Authorities have a statutory duty to provide a district nursing service to all its residents free of charge. The Local Health Authorities were dispersed in 1974 to be absorbed into Area Health Authorities (AHA) (now District Health Authorities (DHA)) who acquired the responsibility for providing the district nursing care to the community.

The basic requirement for a district nurse is the registered general nursing (RGN) qualification with additional training leading to the certificate in district nursing. There has been an increased demand for district nursing due to increasing number of elderly people living in the community, and as a result there are an increased number of chronic and degenerative diseases requiring nursing attention. District nurses are attached to defined practice/s. They are employed by the DHA and are accountable to the district nursing managers. Their job is to assess and meet the needs of the patients in the community and work in close cooperation with GPs and other members of the PHCT. They provide nursing services to patients in their own homes. Some of their routine tasks include following patients who have been discharged from hospital especially for sutures removal and post-operative

wound dressing, installing eye or ear drops, administering medication for needy people, and helping disabled patients to get into bed. They also bathe disabled patients, provide appliances to prevent/treat bed sores, supply incontinence material and other equipment to improve mobility. Above all they inform the doctor if there is any further action warranted.

4.6 Community Midwife

Midwives are required to be registered general nurses with additional educational training needed to obtain the midwifery certificate. They are employed by the Health Authorities. When there was a trend for an increasing number of confinements to take place in hospitals, midwives were supervising antenatal care, assisting during deliveries in the maternity units and assessing the suitability of home deliveries in some selected cases. In recent years more pregnant women have desired their confinement at home. In response to this demand, women are given the choice of their place of delivery (at home or hospital). The midwives supervise antenatal care both in the community and liaise with GPs and hospitals. They are attached to GP surgeries within their defined geographical territory within which they undertake responsibility. It is not uncommon for some patients after being discharged from the hospital following confinement to go to a different geographical region. In these cases the midwife responsible for these patients liaises with the latter region's midwife to arrange postnatal visits.

4.7 Health Visitor

Health visitors are also registered general nurses with additional experience in midwifery with at least part one of the midwifery certificate. They must undertake a year's full-time study in preventive and social medicine, and human development to obtain the health visitor's certificate. They have a statutory duty to visit newborn babies from the day the midwife stops her visit (usually the 10th day). The main function is to assess the child's development undertaken at home or at the child health clinic and observe any physical or psychological abnormality until the child starts school. In this way any deviation from normal can be promptly recognised and steps can be taken to deal with them. Health visitors can be of great help to GPs in assisting them in child health surveillance examinations, advising parents on childhood immunisation, reassuring female patients who may have any fear or doubts regarding cervical smears, immunisation, or family planning. They also play an important role in patient education and mother craft, advise on home safety, home help and welfare benefits. They work in

close cooperation with the GPs and inform them of any relevant cases requiring medical attention.

4.8 Community Psychiatric Nurse

Community psychiatric nurses (CPNs) are registered mental health nurses and are required to have the registered general nursing qualification with an additional 18 months training in community psychiatry, or a 3 year course in colleges or universities. Community psychiatric nurses are employed by the Local Health Authorities and are allocated to a defined geographical area where they liaise with both GP surgeries and hospital psychiatric units. They follow psychiatric patients at home, in hospital clinics and in health centres, and supervise their medication and progress. In several areas the 'Depo clinics' (where psychiatric patients receive their long-acting injections) are run by CPNs. It helps patients by reducing their travel distance and time, and also helps to reduce their anxiety by avoiding the hospital atmosphere.

4.9 Social Worker

The usual requirement for a social worker is either a one year postgraduate university course or a non-university course lasting two years. In addition to their course, students are required to spend half the time in the field learning from practical experience. Social workers are employed by Local Authorities. Their job involves helping people with social problems, for example, housing/re-housing, arranging home help, paying bills (helping to pay bills) and dealing with similar issues. They try to help people with physical disability, people living on their own and others who require help in their day to day life, such as collecting pension money, cleaning the house, shopping, and meals on wheels. They have a statutory duty to take action in cases of proven or suspected cases of child abuse. In cases of mentally ill patients, requiring hospital admission under the 'Mental Health Act', the social worker needs to coordinate between the patient's GP and the psychiatrist.

Chapter 2

WHAT IS STRESS?

This chapter aims to define the concept of stress and different approaches to the study of stress. This is important as it provides a guideline for understanding and clarifying the interactive nature of stress.

The word stress has established a firm place in our modern vocabulary. We hear it being expressed by different people of different cultures, race and social class. People express different uncomfortable experiences as being 'under stress' i.e. 'I am under stress' 'I feel stressed out' or 'my job is stressful'. We often speak of stress as if it were pressure or tension created by pressure. Stress is a complex process by which an individual responds to environmental demands, called stressors that threaten the individual. Stressors are the environmental demands or situations that elicit the pattern of response from the organism. These responses may be physiological, behavioural, cognitive, emotional or a combination of these. Stressors can be life events (for example, death of a spouse, divorce) or small incidents of every day life (for example, daily hassle).

There is so much controversy about the proper use of the term stress that it is difficult to define it precisely. Hans Selye (1980) explained that "*Stress*, like relativity, is a scientific concept which has suffered from the mixed blessing of being too well known and too little understood". Although the word stress is usually perceived as negative, Selye (1976) suggests that stress is not always bad, and viewed here as 'eustress' or good stress. Here stress is described as a pleasant and stimulating experience which is essential for motivation, growth, development and improving performance. The bad aspect of stress is described as 'distress' which is damaging.

1. DEFINITIONS OF STRESS

In the 17th century the word stress (derived from the Latin word stringere meaning to draw tight) was used to mean 'hardship, straits, adversity or affliction'. During the 18th and 19th centuries, the word stress described 'pressure, force, strain or strong effort', attributing to the person's organs and/or mental powers (Hinkle, 1973). Within the field of physics and engineering, stress referred to the strain produced by an external force or pressure. William Osier (1910) observed the relationship between angina pectoris and the hectic pace of life in his patients. Therefore, stress and strain could actually cause disease rather than short term illness. Walter Cannon (1935) was among the first to introduce 'stress' terminology to the scientific community. According to him stress is described as a response, particularly to an emergency requiring a person to cope with the danger of a challenging situation. He proposed 'the fight or flight response' of an organism to its environment. When a person is in danger, or in a challenging situation he can either confront the challenge and fight it or take flight (get away) from the situation as fast as possible. Physiologically the response is quite dramatic. Adrenaline and noradrenaline are released into the blood stream, where they speed up the reflexes, raise the blood sugar level, blood pressure and heart rate and increase the rate of respiration. The mouth becomes dry and the saliva secretion stops. There is sweating from the palms and an increase in muscle tension (Cannon, 1932). Repeated experience of the stress response can break down a person's physiological homeostasis (metabolic equilibrium). This in turn can increase the physical vulnerability of the individual.

2. APPROACHES TO THE STUDY OF STRESS

The term stress has been used to refer to 'stimulus' by some researchers, 'response' by some researchers, and 'interaction' by others. However, researchers such as Lazarus (1966) view it to be a combination of the above factors; he states that 'stress is 'not any one of these things, nor is it stimulus, response, or intervening variable, but rather a collective term for an area of study'. Researchers have conceptualised three approaches to stress.

2.1 Response Based Model of Stress

The response based definition originated from the field of medicine and is described from a physiological perspective. A response based approach suggests that stress be viewed as the response to disturbing stimuli (Figure

2.1). This approach views stress as a dependent variable for study. Hans Selye (1956) was one of the first to examine stress systematically and its effects. According to him 'stress is the non-specific (physiological) response of the body to any demand made upon it'. He believed that stress is the individual's response to the demands of his or her environment. The stress response is the same for all animals regardless of what specific event has triggered it. He developed the General Adaptation Syndrome (GAS) model to describe the individual's physiological reactions to stress.

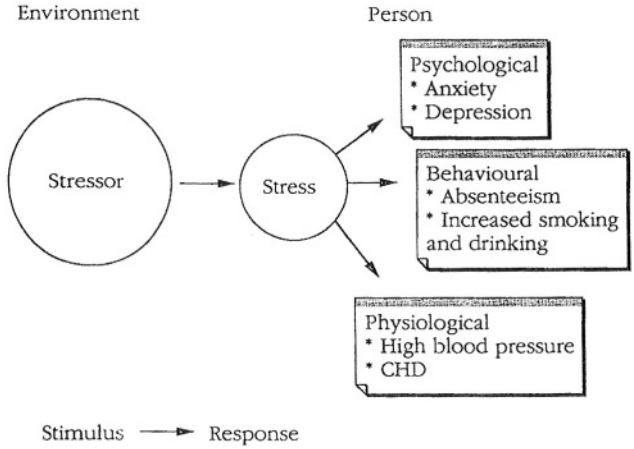

Figure 2.1. A response-based model of stress

The GAS consists of three stages: alarm stage, stage of resistance and stage of exhaustion (Figure 2.2). Alarm stage – this is the first stage in which the body prepares itself for immediate action i.e. the organism's defence mechanisms become active. There are a number of physiological and chemical reactions (such as increased pituitary and adrenaline secretions) to stressors. Cardiovascular and respiratory functions increase and the body is ready to respond. At the same time the body's level of resistance is lowered. If the stressor is severe and continues, resistance may collapse and death may occur. Stage of resistance – during this stage the organism's full adaptation may lead to a successful return to equilibrium. If the stressor continues or the defence does not work then he/she will move on to the final stage. Stage of exhaustion – if the stressor is unusually severe, the body exhausts its reserves of energy because adaptation energy (body's adaptability) is finite. Resistance breaks down altogether, and adaptive mechanisms collapse or death may occur. (see Figure 2.2 for a diagrammatical presentation of GAS). It is not necessary for all three stages

to develop in GAS. Only severe stress leads to the stage of exhaustion and death. The stressors at first may alarm the individual and he/she may then adapt to them.

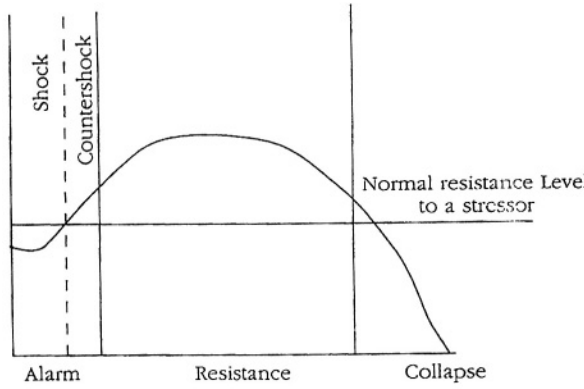

Figure 2.2. Selye's General Adaptation Syndrome. (Selye, 1956)

Selye's concept of non-specificity has been challenged by many researchers, as it is too simplistic. For example, Mason (1971) argued that some noxious stimuli (for example, physical exercise, fasting, heat etc.) do not produce the same pattern of responses. Lacey (1967) argued that the low intercorrelation between the various physiological indices of the GAS refute the concept of a non-specific pattern of response. The responses are stimulus specific, particularly in relation to excretion of catecholamine. For example, the events producing anxiety are associated with release of adrenaline, whereas, events resulting in aggression are associated with release of noradrenaline. One of the major flaws of Selye's theory is that it does not take into account the psychosocial factors to understand human stress. The problem is that it does not address individual differences in either perception or response to stressful situations.

2.2 Stimulus Based Model of Stress

The proponents of this view see the sources of stress as arising solely outside the person. This model describes stress as the stimulus characteristics of environments (Figure 2.3). The stimulus based model of stress has its roots in physics, in particular, the field of engineering. When loads are placed on metals, they produce deformation in them due to internal strain. When the load is removed the metal will eventually return to its original condition if the strain produced is within the 'elastic limit' of the material. If the strain exceeds the elastic limits, permanent damage occurs. Stress can be

tolerated by individuals up to a certain limit beyond which permanent damage may occur.

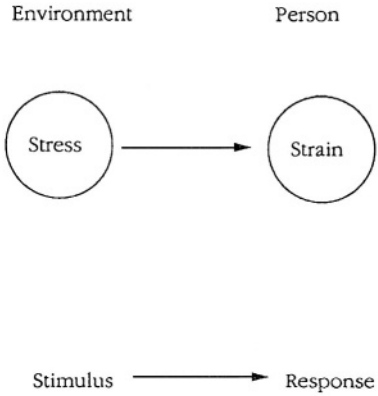

Figure 2.3. Stimulus based model of stress.

This approach has been criticised for a number of weaknesses. It does not take into account individual differences. For example, Lazarus (1966) emphasises that no objective criterion is good enough to describe a situation as stressful, only the individuals experiencing the situation can do this. Also Cox (1978) criticised this approach as being extremely limited when it is applied to human behaviour – for example, according to Cox (1978) 'men and their organisations are not machines. Unless the stress/strain relationship in men functions both unconsciously and automatically, we have to accept some intervening psychological process which does mediate the outcome of that relationship. Stress has to be perceived or recognised by man. A machine, however, does not have to recognise the load or stress placed upon it.' For example, boring jobs (underload) are as stressful as excessive demanding (overload) jobs to individuals. This approach views stress as an independent variable for study. Cox (1978) argued that all future research on stress should adopt a multivariate approach. According to him there is an overlap between a response based approach to stress and a stimulus based approach. Although this model has weaknesses, it has some attraction to organisations trying to identify common stressors that might affect most of the individuals.

2.3 Interactional Model of Stress

The interactional model of stress is a psychologically based approach and stress is interpreted as an individual phenomenon. When confronted with the same situation some individuals experience stress but others do not. Both

stimulus and response based theories of stress ignore the importance of the individual in the stress equation. Cox and Mackay (1976) criticised the theoretical explanation of both the stimulus and response model. According to Cox (1978) 'stress can be described as part of a complex and dynamic system of transaction between the person and his environment'. Also Lazarus and Launier (1978) suggest that stress is a transaction between the individual and environment. Lazarus emphasises that it is the nature of the relationship between the two which is crucial: 'Stress refers, then, to a very broad class of problems differentiated from other problem areas because it deals with any demands which tax the system, whatever it is, a physiological system, a social system, or a psychological system and the response of that system' (Lazarus, 1971).

According to Lazarus (1966), 'stress is not simply out there in the environment'. Stress is a subjective experience depending on the individual's perception of the situation. He stresses the role of perception and cognitive appraisal in the stress response. The cognitive processes (thoughts, attitudes, beliefs, images) play an important role in determining whether the situation will be interpreted as stressful. He suggests that in order for an event to be a stressor, it must be appraised as threatening. When an individual is exposed to a potentially stressful situation, he/she appraises the situation and makes judgements about the situation, how harmful it is to him or her (primary appraisal). Stress occurs only if the individual involved perceives the situation as threatening to his/her important goals and he/she will be unable to cope with these demands (Lazarus and Folkman, 1984; Lazarus *et al.*, 1985). If the situation is judged to be stressful secondary appraisals are made (see Figure 2.4). In the secondary appraisal stage, the individual determines the available coping resources and the likelihood that he or she can employ these successfully. If the person has confidence in his/her coping capabilities then the threat is likely to be negligible. If, however, the individual is uncertain of his/her coping capabilities he/she is likely to feel insecure. Generally, after we appraise an event as stressful (primary appraisal) we engage in assessing our resources (secondary appraisal). However, secondary appraisal 'does not necessarily follow primary appraisal in time' (Cohen and Lazarus, 1983). The two processes are interrelated. Sometimes our secondary appraisal of limited resources may lead to primary 'appraisals of threat where they would not otherwise occur' (Coyne and Holroyd, 1982). Lazarus (1976) and McGrath (1970) emphasise the importance of the way that individuals perceive themselves and the events that impinge upon them. Therefore perception, appraisal and judgement of the situation are all important. This approach treats stress as an intervening variable.

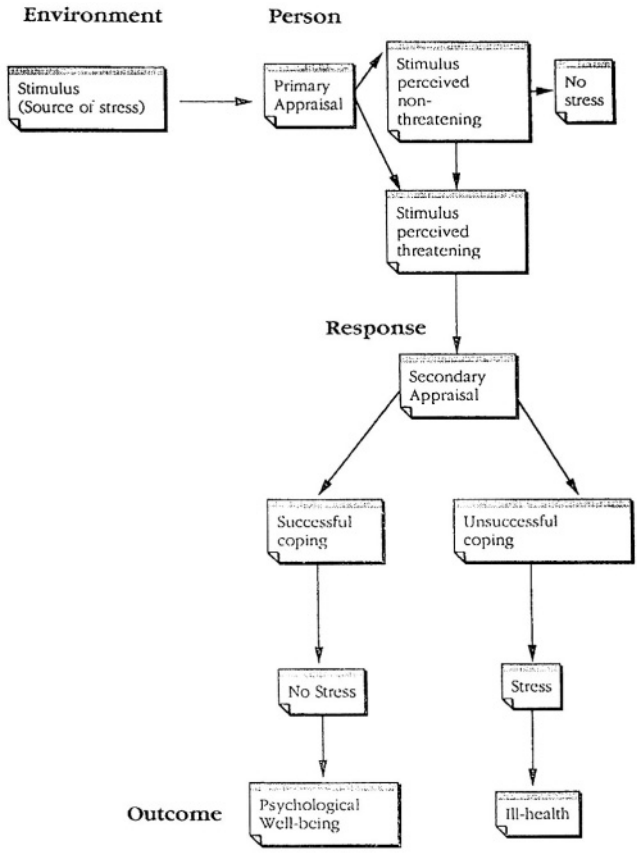

Figure 2.4. Cognitive appraisals.

2.4 Person-Environment (P-E) Fit

The interactive model of stress provides a basis for the P-E fit approach, which suggests that stress arises from the misfit (or poor fit) between the person and his/her environment. The fundamental notion of the 'P-E fit' model is that individual adjustment consists of 'goodness of fit' between the characteristics of a person and properties of that person's environment' (French *et al.*, 1982). Two aspects of 'fit' have been considered in the work environment. 1. To what extent the individual's attitudes, values and abilities

meet the demand of the job, and 2. To what extent the work situation fulfils the needs of the person.

The main criticism of this approach is that it assumes some stagnant situation but in reality stressor situations and response to stress are dynamic processes.

The interactional models of stress are generally too complicated for organisations to adopt although there is growing research into the area. The response based model and/or stimulus based model are adopted by some organisations. In adopting the response based approach the organisations shift the responsibility to the person involved. Here the organisation tries to help employees cope with environmental stressors by introducing intervention programmes without attempting to eliminate the cause of the stress. Other organisations may adopt a stimulus based approach where they make changes to the working environment but do not take the individual needs into account. However, with the availability of sophisticated data analysis techniques, by using computers and taking objective as well as subjective measures of stress, we are now able to understand the complexities of stress. We are trying to make sense of why some individuals cope better in the same environment than others and how individuals could cope with environmental stress which cannot be eliminated. Individual differences will be discussed in chapter 4. First, understanding the sources of occupational stress will be discussed in chapter 3 because it is important to recognise the potential stressors in the environment.

Chapter 3

OCCUPATIONAL STRESS

Although different occupational groups describe their work as stressful, it seems that some occupations carry more stress than others. There is very little research to compare stress levels of different occupations and no research to compare stress levels within primary health care professionals. However, every job has potential sources of stress and we have identified these sources of stress for different primary care occupational groups in chapter 6. In this chapter we shall give a general overview of occupational stress research because the aim of this chapter is to understand stress at work. Researchers have identified six main factors which are sources of occupational stress common to all jobs (Cooper and Marshall, 1978). Figure 3.1 presents a simple model of occupational stress which shows the sources of stress that exist in the environment, the moderators, and consequences of stress, based on similar conceptualisations by different researchers (e.g. Cooper and Marshall, 1976; French *et al*., 1982; Schuler, 1982; Fletcher, 1988). Five of these are concerned with work stress, and the sixth one is an interface between work/home. The causes of stress at work are not restricted to the work environment, and the work/home interface is equally important. As the demands of the home environment are significantly related to occupational stress it is desirable to include the work/home interface as one of the factors. The factors are:

1. Factors intrinsic to the job
2. Career development
3. Role based stress
4. Relationships at work
5. Organisational structure and climate
6. Work/home interface

We shall examine each of these categories briefly. However it is important to note that these categorisations are not discrete components.

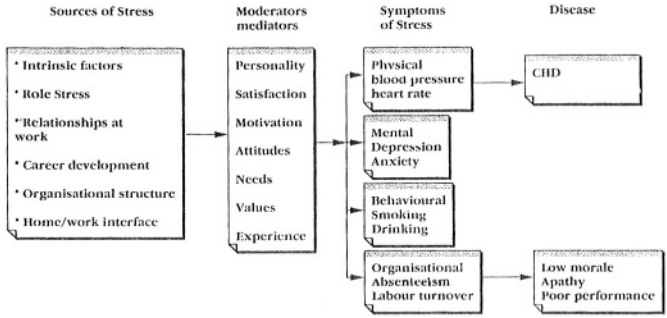

Figure 3.1. A model of occupational stress

1. FACTORS INTRINSIC TO THE JOB

Within this category researchers have documented many factors such as physical working condition, workload (including work overload and work underload, working long hours), shift work/night work, risk and danger, new technology and travel which may be intrinsic to the job. These are reviewed below.

1.1 Physical Working Condition

The physical demands of the working environment, such as noise, lighting, and extremes of temperature can affect one's mood and mental state. For example, it was revealed by Kornhauser (1965) that unpleasant working conditions, the necessity to work fast, to expend a lot of physical effort and to work excessive and inconvenient hours were directly related to poor mental health. Other researchers found that physical health is adversely affected by repetitive and dehumanising work settings, such as fast-paced assembly lines (Cooper and Smith, 1985). It was found from a study that excessive noise on a recurring, prolonged basis can cause stress (Ivancevich and Matteson, 1980). Noise seems to operate less as a stressor where it is excessive but expected, than in those environments where it is unexpected. Kelly and Cooper (1981) found that poor working conditions (e.g. noise, heat, fumes) together with the social and psychological consequences of isolation and tension had a significant impact on blue-collar workers.

Work may be impaired by thermal conditions when it requires critical decision, fine discrimination and performance of skilled action. It is suggested by Ramsey (1983) that there is a correlation between comfort and a person's performance on perceptual motor tasks. Working in an overheated

environment may result in lowered tolerance to other stressors and adversely affect worker motivation (Smith *et al*., 1978). Another potential source of stress is lighting. It is important to acknowledge that poor lighting and glare can lead to eye strain, visual fatigue, headache, damaged vision, tension and frustration. Due to these factors the task could become more difficult and consume more time (Poulton, 1978). Hence, it is essential for a work environment to create a pleasant atmosphere which ultimately enhances performance.

Poorly designed physical environment of the workplace can be another potential source of stress. For example, in a patient satisfaction survey, Rout and colleagues (1994) found that patients were dissatisfied with the services in the health centre while waiting for the GP because of poor accommodation, lack of natural lighting, poor ventilation and lack of toilet facilities. When the employees in that health centre were interviewed later, by one of the authors (U. Rout) their replies were similar to the views of the patients (Rout *et al*., 1996). Therefore it is important to have a clear and orderly place with good ventilation for employees to enjoy their work and keep their morale high.

1.2 Workload

Both work overload and work underload are described by researchers as potential sources of stress. Distinctions of workload have been identified, such as quantitative overload or underload and qualitative overload or underload. Quantitative overload refers to having too much to do in a given period of time and quantitative underload refers to having too few tasks to do in a given period of time. On the other hand qualitative overload refers to work that is too difficult for a person and qualitative underload results when the task does not utilise the skills of the individual (French and Caplan, 1973). Yerkes-Dodson Law (Yerkes and Dodson, 1908) explains the curvi-linear relationship between the amount of work and health and performance in the inverted - U- hypothesis (see Figure 3.2).

1.3 Work Overload

Researchers found that both quantitative and qualitative work overload predicted high levels of anxiety and depression in a group of British tax inspectors (Cooper and Roden, 1985). French and Caplan (1970) showed an association between objective, quantitative overload and cigarette smoking, a risk factor in coronary heart disease (CHD) and cancer.

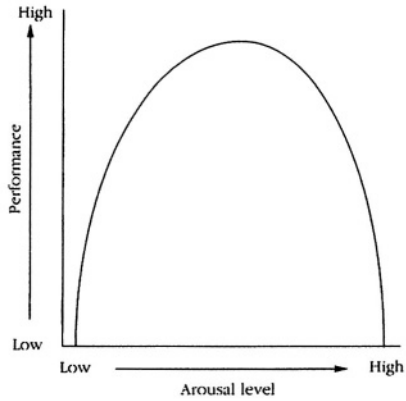

Figure 3.2. **Performance as a function of arousal level; Yerks and Dodson's inverted "U" curve.**

Both qualitative and quantitative work overload are potential stressors to primary care professionals. For example, increased demand by the patients on the GPs to provide comprehensive and continuing care imposes high pressure on them. In Cartwright's survey on patients and GPs, the lay respondents commented, 'Doctors today are overworked (Cartwright, 1967). If they had fewer patients they could give them more time'. In our two previous studies (Rout and Rout, 1993, 1994) it was found that time pressure and work overload were among the sources of top stressors for GPs. Other researchers found that lack of time was the most frequently acknowledged stressor for the GPs (Roland *et al*., 1986; Howie *et al*., 1989). Cartwright (1977) found that 20% of GPs were pressurised for time. GPs mentioned 'Not enough time ever to do one's work adequately and still have time to live a normal family life' (Cartwright and Anderson, 1981). When working faster, doctors deal less adequately with psychological problems and pressure of tune also affects judgement in other areas (Howie *et al*., 1989).

A study of 180 doctors who were alumni of the Case Western Reserve School of Medicine reported that the sources of dissatisfaction in the lives of these physicians were not having personal free time, being on call and carrying a heavy workload (Mawardi, 1979). Mawardi (1979) suggested that, in the USA, private practitioners rated time related stresses as the greatest dissatisfaction. Doctors felt that the demands of the workload and continuous on call responsibility leaves very little personal time.

1.4 Work Underload

Work underload has been described as repetitive, routine, boring and understimulating work which is associated with ill health (Cox, 1980). Work underload was a significant source of stress among crane operators and lack of challenge and boredom were found as significant predictors of raised anxiety, depression and job dissatisfaction (Cooper and Kelly, 1984). In our interview sample of receptionists (Rout and Rout, in preparation) one of the receptionists was very unhappy with her workload because her work was very repetitive and lacked novelty. For example, she said:

"My job is boring most of the time because the practice manager always asks me to do the repeat prescriptions and type the letters. But there are so many things to do in the office one could be occupied for the whole day without thinking of work at all".

1.5 Long Hours

Jobs which require long hours of work may affect the health of employees. For example, a study (Breslow and Buell, 1960) found that long working hours was linked to death due to CHD. General practitioners are contracted to provide 24 hours service to their patients. This implies that their job is not 9 to 5 and can extend from early morning to late evenings and beyond. Some GPs may have to work excessively long hours. See the case study in box 3.1 as an example.

Box 3.1

Dr S is a single handed GP in a deprived area. She works excessively long hours. She initiated an appointment system to see patients in the surgery so that she could finish the surgery on time. However, the system did not work. Therefore she runs open surgeries. A large proportion of her patients are mainly Asians who are very casual about time keeping. Most of the time patients come in groups, usually several members of the family, towards the end of the surgery time. At the time of closing the surgery, there would be several patients still sitting in the waiting room to be seen. The reception staff are not pleased to stay behind until the last patient is seen. Some patients knock at the door even after the front door is closed. Dr S is unable to stick to her work schedule due to the high demands by her patients. She never manages to go home on time and her reception staff have the same problem as well.

1.6 Shift Work / Night Work

For many occupational groups shift work represents a major source of stress. It was found in a study that shift workers complain of fatigue and gastrointestinal disorders more frequently than day workers (Rutenfranz *et al.*, 1977). In another study of offshore oil rig workers, the third most important source of stress was shift work along with physical conditions and travel (Sutherland and Cooper, 1987). For those GPs who provide out-of - hours cover, the loss of sleep may be similar to the stress associated with shift work or long working hours. GPs who provide maternity care, single-handed rural GPs, and those who cover their practices during night time without using deputising services, are bound to have disturbed sleep. Disturbed sleep patterns can cause deterioration in health and well-being in GPs which may in turn affect other factors such as interpersonal relationships at work and at home, efficiency and judgement. In recent years there has been a proliferation of cooperative services organised by the local GPs in various parts of the country providing out of hours cover for participating GPs. This might lower GPs self-rate stress and enable them to organise their work schedule better. Some other members of the primary health care team (i.e. district nurses and midwives) also provide out of hours service and this can be a source of stress for them.

1.7 Risks and Dangers

Recently patients have become more demanding and their expectations have risen dramatically. There is a possibility of threats from the patients if their demands or wishes are not fulfilled. There are several incidences in the country where GPs have been physically assaulted, stabbed and even murdered. GPs are most vulnerable to attacks during night visits which is a cause for concern. Occupational groups who face danger and risk such as police, mine workers, firemen, and soldiers often appear to have reduced stress levels, particularly when trained adequately (Arnold, Robertson and Cooper, 1991).

1.8 New Technology

The need to acquire skills to use new equipments may cause stress to the individual. In a rapidly changing work environment where skills may quickly become obsolete it is an added source of stress. In a study among executives and managers it was found that Japanese executives suffered from stress to 'keep up with new technology' and a high percentage of British managers also reported high pressure at work in keeping up with new

technology (Cooper, 1974). In England, GPs have been encouraged by financial help from the government to use computers and now they are in common use in general practice. Primary care professionals need to acquire computer skills. However, they are likely to encounter problems with breakdown, maintenance and upgrading of both software and hardware. Many GPs are unhappy to use the computers during surgery consultations as patients feel that GPs interact more with the computers than the patients. In our interview sample we found that GPs were under time pressure while trying to balance their attention between the computer and patients during consultation (Rout and Rout, 1993). We also found that practice managers, practice nurses and secretaries liked to use computers, but felt pressurised.

1.9 Travel

Travelling may be a source of stress when it takes up a lot of time everyday to commute to and from the work place. In the case of GPs and nurses, travelling is a part of their job, as they visit patients in their homes even in adverse weather conditions. In our study (Rout and Rout, 1993) GPs found it stressful to visit patients in poor weather conditions. Families may suffer when a member spends a lot of time away from home in travelling.

2. CAREER DEVELOPMENT

Career development includes a number of issues which can act as potential stressors for the employees. For example, lack of job security, over or under promotion, fear of redundancy, retirement, and many other performance appraisals can affect one's life. People suffering from career stress often show high job dissatisfaction, poor work performance, burnout and less effective interpersonal relationship at work (Ivancevich and Matteson, 1980).

2.1 Job Security

Threat of job loss is a potential source of stress. For example, Cobb and Kasl (1977) found that fear of job loss was associated with various health problems, such as ulcers, colitis and alopecia. Threat of demotion can be a source of stress for people who believe that they suffer from the erosion of status. Some people may have to stay in a job even if they dislike it because they do not have any suitable alternative to change. For example, some GPs in our interview sample (Rout and Rout, 1993) claimed that they are being

trapped in the job because they have nowhere to go. See box 3.2 for an example.

In our previous study interviews with overseas doctors revealed that most GPs in the sample had entered into general practice as a second choice due to a lack of opportunities to become specialists in hospitals (Rout, 1989). Some stated that they came to this country with the hope of obtaining a higher degree and becoming specialists, but experienced discrimination at every stage. Although they had qualifications and experience which were equal to local graduates they saw no prospect of becoming specialists.

Box 3.2

Dr T was a medical graduate from India. Her husband was a medical registrar in a local hospital. She always wanted to get into general practice. She thought she was lucky to get a partnership in a practice in the same area where she lived. Her senior partner was nice to her and gave the impression of being helpful. Things appeared different after a year when she realised that her senior partner had been exploiting her by preventing her registering patients in her name and making her work more than she was supposed to do. Dr T was very unhappy about it but was unable to do anything because she knew that she could lose her job if she made any protest. In the meantime her husband's tenure had come to an end and he had difficulty in getting a job in his desired field. He had to take up a job in a nearby hospital which was not his first choice. The couple had to stay in the area because of the financial commitments and their children's education. Dr T continued working for two more years after which it became unbearable. She resigned from her job and opened a surgery where she started from the scratch. After five years of struggle, she has built up her practice and now feels financially sound.

2.2 Over/Under Promotion

Over promotion can result in stress, for example, when a receptionist is promoted to a practice manager's post she will be expected to take on different responsibilities. She may find it difficult to manage things which require special skill and experience such as administration and delegation. When an individual is promoted too soon, without having the required skills or is already working hard in the previous job, she may experience low self-esteem. Lack of promotion prospects can also be a source of stress when an individual has mastered his or her job. As a result of over or under promotion, people develop behavioural disorders ranging from minor psychological symptoms and psychosomatic complaints to serious mental disorder (A'Brook, 1973).

2.3 Job Performance

Performance appraisal can be a potential source of stress for both appraiser and the appraised. In general practice regular appraisal of employees by the practice managers could be stressful especially when a decision needs to be taken to penalise a receptionist/secretary after continuous appraisal (Rout, 1996). In other instances GPs may find it stressful to fire a practice manger who is incompetent. Now the new phenomenon of GP appraisal (revalidation) is awaiting implementation. The Department of Health and the Royal College of General Practitioners are jointly planning to develop a strategy for assessing the competence of GPs. GPs are apprehensive about revalidation.

2.4 Retirement/Redundancy

Particular pressure can arise for individuals who are forced to retire early. For example, after the introduction of the GP contract in 1990 some GPs especially middle aged and older GPs found it difficult to cope with the change. Anecdotal evidence suggests that these GPs preferred early retirement to working under stress and strain. Thus their unplanned early retirement is likely to have caused anxiety and stress. Some others could not do the same because of their heavy financial commitment (i.e. mortgage, private education of their children). These GPs felt trapped in the middle. Our study supports the views of McGoldrick and Cooper (1985) that the later years at jobs provide particular pressure which becomes more significant with increasing age of the employees.

The negative consequences of redundancy are well documented. For example, Fryer and Payne (1986) suggest that a person may suffer from loss of status which accompanied the job, a sense of failure, lowered self esteem, low life satisfaction, depression, loneliness and isolation, and other behavioural problems.

3. ROLE BASED STRESS

An individual's role at work has been a main source of occupational stress, involving role ambiguity and role conflict, as well as responsibility for people and conflicts stemming from organisational boundaries.

3.1 Role Conflict and Role Ambiguity

Role conflict occurs when there are conflicting job demands from different members in the organisation, or by being involved with a job that conflicts with personal values. It was found that men who suffered from role conflict had lower job satisfaction and higher job related tension (Kahn *et al.*, 1964; Vansell *et al.*, 1981). Researchers suggest a wide range of situations which create role conflict such as the first job, a new boss, a transfer, a new company, a promotion, changes in the structure of the company will create stress (Ivancevich and Matteson, 1980). Studies also found that role conflict can lead to risks of cardiovascular ill health (for example, raised blood pressure and abnormal blood chemistry) (Ivancevich and Matteson, 1980).

Role ambiguity occurs when the individual has inadequate information about his/her work role and the behaviour that is expected from colleagues. This is quite evident in general practice for example; there is lack of clarity between the job description of the practice nurse and the district nurse and there is also some overlap between these two jobs. These professionals are under stress due to role ambiguity. GPs also face role ambiguity due to inadequate information regarding their role. For example, following the 1990 contract GPs were encouraged to set up various health promotion clinics but two years later the system was abolished. GPs felt that the goal posts were being moved too often and decisions were being taken by the government unilaterally which they found was stressful. Recent introduction of PCGs and PCTs imply further changes in general practice. A study revealed that men who suffered from role ambiguity experienced lower job satisfaction, high job related tension, greater futility and lower self confidence (Kahn *et al.*, 1964). French *et al.*, (1982) revealed that women perceive more role ambiguity than men.

3.2 Responsibility

Responsibility has been identified as a potential stressor associated with one's role in the organisation. Both responsibility for people and responsibility for things have been identified as stressors but responsibility for people is more likely to be stressful than responsibility for things. Researchers found that responsibility for people was related to serum cholesterol levels, diastolic blood pressure and heavy smoking (French and Caplan, 1970). Increased responsibility for people means that the individual has to spend more time interacting with others, attending meetings, working alone, and as a consequence spend more time in trying to meet deadline pressures and schedules (French and Caplan, 1970).

Researchers acknowledged that responsibility for people is significantly more likely to lead to CHD than responsibility for things (French and Caplan, 1970; Wardwell *et al*., 1964). Other authors found that responsibility for people's safety and lives was a major determinant in predicting risk of heart disease among air traffic controllers (Crump *et al*., 1980). A study in the UK which covered over 1000 managers revealed links between physical stress to age and level of responsibility (Pincherle, 1972). There is an increased association of CHD risk factors with older age group managers who have increased levels of responsibility. It must be acknowledged that too little responsibility may also be a source of stress for individuals.

The members of the primary health care team deal with people which involves face to face consultation. One would presume that as a consequence of this the individual members of the primary care team carry greater risk, and are likely to suffer from stress. The example of a case study in box 3.3 highlights the degree of responsibility that lies with different individual members. This case clearly demonstrates the degree of responsibility that lies when dealing with people. Emma presented a very common condition which usually requires no specific treatment, but in meningitis the presentation of symptoms can be deceiving. There can be sudden deterioration of the condition and at the best, the patient has very little chance of survival. Although Dr B had seen her earlier there were no significant clinical signs to suspect meningitis. Dr R had the advantage of seeing Emma when the signs were obvious, but sadly it was too late to save her.

Box 3.3

Emma, a 13-year-old girl was brought into the surgery by her mother without an appointment to see a doctor. First her mother reported to the receptionist requesting an emergency appointment for Emma to see a doctor for a sore throat. She is well known to the staff for demanding emergency appointments for each and every condition in the past. The receptionist gave her an appointment for the next day. Emma's mother was not happy with the offer and wanted to talk to the practice manager. The practice manager rechecked the appointment book and confirmed that it was the earliest appointment that she had been offered. As usual Emma's mother was adamant for an immediate appointment so the practice manager offered her an appointment to see the practice nurse. Emma saw the practice nurse who found Emma had a sore throat which she thought was due to a virus infection, and advised Emma to take paracetamol every six hours. She assured her that she would be better in about 48 hours time. Emma's mother was not very happy and requested to see a doctor. The nurse eventually led Emma to Dr. B. Dr B examined her and found that Emma had a slight temperature and inflamed throat. She reconfirmed the

diagnosis of viral infection and advised the same as the practice nurse had stated earlier but offered to see her again if there was any significant change in her symptoms. Emma returned home but gradually her condition deteriorated. Her temperature rapidly rose and she started vomiting. An hour later she developed a rash all over her body, became delirious and finally unconscious. Emma's mother rang the surgery for a home visit. This time Dr R, a partner in the same practice went to see her. He was shocked to see Emma in a semiconscious condition and observed signs of meningitis. He telephoned for an ambulance without any delay. Emma was taken to hospital but sadly died on the way. This is a potential case for litigation. Although in this particular case failure to diagnose may not be negligence, the process of litigation can be very stressful.

4. RELATIONSHIPS AT WORK

Working with other people can be both a source of stress and support. Supportive relationship at work is considered to be the central factor for organisational health and individual well-being. Researchers suggest that a supportive social relationship with subordinates, peers and supervisors at work will reduce the chances of interpersonal pressures, and directly reduce perceived stress at work (Lazarus, 1966). On the other hand, inconsiderate behaviour by the boss seems to contribute to feelings of more job pressure amongst workers (Buck, 1972). It was revealed that personal relationships were considered 'time consuming' or 'trivial' among research and development scientists who were promoted to management jobs (Cooper and Marshall, 1978). GPs may be particularly vulnerable to managerial stress because of their technical and scientific background. These GPs may give low priority to relationship at work. Also, some practice managers do not have any recognised management training for managing a practice in new and flexible ways. For these practice managers, supervising the work of receptionists could be a critical aspect of his/her job. Today, emphasis on team work and participation at work are the key factors to the job in primary care. This is discussed in chapter 7. It was found in a study that most of the practice managers were senior receptionists with very little management skill (Rout, 1996). Due to continuous changes in the NHS up-to-date training is essential for GPs, practice managers and other primary health care professionals (see chapter 9).

5. ORGANISATIONAL STRUCTURE AND CLIMATE

Another potential stressor for different occupations arises from the organisation itself – its structure and climate, which can make working life either satisfactory or stressful, such as little or no participation in the decision making process, lack of effective communication and consultation and restriction in behaviour (Cooper and Marshall, 1976). In a national survey Margolis *et al.* (1974) found non-participation at work was a consistent and significant predictor of strain and job-related stress. It was found to be related to health risk factors, including overall poor physical health, escapist drinking, depression, low self esteem, low life satisfaction, low job satisfaction, low motivation at work, intention to leave job and absenteeism from work. Caplan and colleagues (1975) revealed that lack of participation in work activity was associated with negative psychological mood and behavioural responses including heavy smoking and escapist drinking. Opportunity for participation in decision making produced significantly greater job satisfaction, higher feelings, of self esteem and low job related feelings of threat (French and Caplan, 1970).

In primary care organisations sometimes practice managers complain that they do not get an opportunity to participate in decision making and receptionists usually are being excluded from organisational communication. Participation in the decision making process may help to increase employees 'investment' in the organisation, create a sense of belonging and improve communication channels. It is important that GPs should communicate with their employees effectively and involve them in participative decision making.

6. WORK/HOME INTERFACE

Stress at work may spill over and have a negative effect on family life, while stress at home may put strain on the individual at work. Researchers believe that there is a need to understand the reciprocal relationship between work and home demands (Burke and Greenglass, 1987). However, evidence suggests that work has a much stronger influence on family than the reverse (Evans and Bartolomè, 1984). Extreme life events (such as divorce, death of a spouse or partner) can affect life at work.

Researchers found that the home/work interface is a significant source of stress for both males and females, although differences exist between the two sexes (Davidson and Cooper, 1983). Married women with young children are increasingly entering the labour market (Lewis and Cooper,

1995) and the employment of married women has been blamed for the increase in the divorce rate. Exclusively employed mothers carry a disproportionate share of household and child care responsibilities (Emmons *et al*., 1990; Hochschild, 1989; Lewis and Cooper, 1988). Moreover, family obligations increase with parenthood, and this increase is greater for women than for men. Employed mothers would therefore be expected to experience greater stress and strain than homemakers.

Pahl (1971) argues that the demand of combining work and family roles may be highly stressful and exhausting. The stress of managing multiple roles is greater when work and family role responsibilities are both heavy (Emmons *et al*., 1990). There is growing concern about the psychological complications which can arise when occupying both family and work roles simultaneously (Barnett *et al*., 1992; Eckenrode and Gore, 1990; Repetti *et al*., 1989). Noor (1994) found that there was no relationship between women's employment status and their well-being. However, it was revealed from other studies that married women with younger children had worse mental health than those without children (McLanahan and Adams, 1987). It has been suggested that for this group, trying to balance job demands and the care of very young children may increase the stress of employment and reduce its positive effects.

Research evidence suggests that the average total workload (sum of paid and unpaid work) of working women was 78 hours per week compared to 68 hours for men. Crogham (1991) found that the total working day for working mothers was 7 hours longer than that of fathers. These long working hours are a possible contributing factor for stress experienced by working women (Frankenhaeuser *et al*., 1989). A study of male and female managers in the UK, revealed that 82% of the women managers felt they faced 'greater pressures than men as managers' (Scase and Goffee, 1989). The most common pressure was associated with the conflicting demands of home and work for these women managers (Scase and Goffee, 1989).

6.1 Dual career family

Economic pressure and the need to develop one's self identity, are important motivators for women to pursue full-time careers outside the home. In Britain women now constitute 45 per cent of the labour force (EOC, 1996). Dual career marriage is now becoming part of Western life. Rapoport and Rapoport (1971) describe families in which both heads of the household pursue a professional career, whilst maintaining a family relationship. Dual career couples share three jobs between two individuals, i.e., two careers and looking after the home. Women are faced with conflict because of society's traditional expectations concerning their role. However,

in a review of literature it was suggested that men are taking a greater share of household tasks than previously but they have not taken the family role to the same extent as women have taken for paid work roles (Pleck, 1993). Although both men and women showed egalitarian attitudes towards work and family roles, in reality the division of labour at home continues to be unequal. When couples become adversaries rather than offering mutual support, the relationship may suffer.

Since women now constitute a sizeable proportion of the workforce, organisations can no longer afford to ignore the effects of home pressures at work. Researchers have suggested organisational policies for the reduction of stress in dual career families (Cooper, 1981). For example, on-site child care, flexible working hours, job sharing, more part-time work, paternity leave and paid leave for child sickness. We shall discuss these in chapter 8.

It has been acknowledged that individual differences relate to perceptions of stress in the environment. However, several individual differences variables have been explored as either mediators of stress appraisal or moderators of the stress-outcome relationship. Therefore, we shall review individual differences variables such as personality variables that are frequently studied in the stress literature and each has some evidence regarding its stress effects. We shall also review other moderators of stress such as coping strategies, life events, social support, ethnicity and gender in the next chapter.

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Chapter 4

THE INDIVIDUAL AND STRESS

In chapter 2 we have discussed that the interaction between the person and the environment leads to the stress response. In chapter 3 we reviewed the potential stressors present in the environment. This chapter is intended to consider individual differences which influence the experience of occupational stress.

1. PERSONALITY CHARACTERISTICS

Why are certain people more vulnerable than others to the stressors they encounter? The individual's personality, coping strategies, life stages, age, sex, ethnic background, previous experience, number and intensity of stressors and degree of social support he/she receives are seen to affect stress vulnerability. It is important to note that situations are not inherently stressful but there are certain personal factors which might make a person more or less vulnerable to stress. Researchers have identified different personality types which appear to be more 'stress prone' than others. In this chapter, we will consider personality types, life events, social support and coping strategies. In addition, certain characteristics such as age, sex, and ethnic background will be presented.

2. TYPE A: CORONARY-PRONE BEHAVIOUR

The notion of Type A behaviour pattern was first introduced by two cardiologists, Meyer Friedman and Ray Rosenman (1974) in the early 1960s and developed later establishing a relationship between certain behavioural patterns and the prevalence of coronary heart disease (CHD). These traits

were referred to as the ‘coronary prone behaviour pattern’ Type A (high risk of CHD), as opposed to the more relaxed 'Type B' (who had a low risk of CHD). They observed an unusual pattern of behaviour common to their cardiac patients attending the clinic. These patients were agitated and had a tendency to sit on the edges of the chairs. An upholsterer who came to their office to repair furniture commented on the excessive wear on the front edges of the couches and chairs. Following this Friedman and Rosenman launched the research which led to establishing Type A behaviour common to their heart patients.

Type A behaviour was found to be the overt behavioural syndrome characterised by 'extremes of competitiveness, striving for achievement, aggressiveness, hyper-alertness, explosiveness of speech, tenseness of facial musculature and feelings of being under pressure of time and under the challenge of responsibility'. It has also been suggested that 'people having this particular behavioural pattern were often so deeply involved and committed to their work that other aspects of their lives were relatively neglected' (Jenkins, 1971). The most significant trait of the type A person is his ceaseless sense of time urgency. Rosenman and Friedman (1974) refer to this pattern as the 'hurry sickness'. On the other hand, type B individuals are characterised by Jenkins *et al.* (1967) as being more relaxed and easy going, rarely becoming impatient, not easily irritated, working steadily without a feeling of being driven by time pressure, and speaking in a slower and more modulated manner. Rosenman *et al.* (1966) maintain that this dichotomy is not a sharp division as 'the subject with behaviour pattern A simply exhibits to an enhanced and sometimes excessive degree certain traits which are variously present in subject with pattern B but to a lesser degree'.

In their study on health service workers Rees and Cooper (1992) found that doctors had the highest overall Type A score (apart from general managers) and scored highest on the three Type A variables. They reported being more goal-oriented, under much time pressure and were very ambitious in comparison with other health workers. This may suggest that doctors may be more prone to higher stress levels and to stress-related illnesses (such as CHD).

Rosenman (1978) proposed that many people do not possess Type A characteristics when they enter an occupation but increased time pressures, demands for speed and conscientiousness required by the job can convert a relaxed Type B into a Type A individual. In general practice, Porter and colleagues (1985) found that extreme Type A personalities are more likely to report feelings of stress than extreme Type B personalities. Nevertheless, the authors warn that caution should be taken because only 4 out of the 15 doctors fell into these categories. It remains to be seen whether doctors and primary care professionals were of Type A personality before entering into

their profession or whether they develop or intensify such personality after entering into the profession.

Consider an example of how two people react differently to the same situation (see box 4.1). By analysing two personality (Type A/B) types in box 4.1 one may conclude that the GP (Type A) did not achieve anything by reacting in an irrational manner whereas the practice manager (Type B) utilised her time constructively by planning the evening dinner. The GP not only lost his time, but he also disturbed the physiological mechanism in his body by being restless which may have caused damage to his health and well-being.

Box 4.1

A GP and his practice manager were going to attend a primary health care workshop in a postgraduate centre. On the way, there was a traffic jam due to an accident. They had only 15 minutes to reach their destination. The GP started to become restless and began to open and close his car window in desperation. He started to swear, played loud music and beat drums on the dashboard. On the other hand, the practice manager sat in the car calmly and began to draw plans for the evening dinner. The personalities of the GP and the practice manager, and the coping strategies they used were totally different. The GP was impatient as he was getting delayed but the practice manager was calm, composed and engaged herself in doing a useful task.

The criticism of the early studies were that they were retrospective in nature but this methodological weakness was overcome by the Classic Western Collaborative Group Study (Rosenman *et al*., 1964, 1966), which largely supported the results of the earlier studies. This was a prospective study of more than 3400 American men who were evaluated by psychiatrists after intensive interviews as being Type A or Type B. It was found that after two and half years Type A men between the ages of 39 and 49 had 6.5 times the incidence of CHD than their Type B peers. Type A men between the ages of 50 and 59 had 1.9 times the incidence of CHD than Type B. In addition, the Type A men had a large number of risk factors of heart disease such as elevated serum cholesterol levels, elevated beta-lipoproteins and high blood pressure. The same relationship between behavioural types and CHD was found after four and half years of study. In the Framingham Heart Study (Haynes *et al*., 1978a, 1978b, 1980, 1981) Type A behaviour was a predictor of CHD among men in white-collar occupations. However, the results of some studies have not always found consistent relationships between type A behaviour pattern and CHD.

2.1 Type A Negative Components

The relationship between type A and CHD began to fade after about 1977. There were also some surprising findings that type As had lower mortality after a first heart attack than did type B patients (Dimsdale, 1988; Ragland and Bland, 1988). It is possible that all the behaviours do not contribute equally to coronary heart disease. The negative components of type A personality construct are anger, hostility and aggression (Spielberger *et al*., 1985). Research suggests that hostility and aggression is higher in type A people than in others (Check and Dyck, 1986). Other researchers during the 1980s also suggested that the toxic ingredients of type A were hostility and anger (Blumenthal *et al*., 1987; Dembroski and Costa, 1987). Re-analysis of data from the Western Collaborative Group Study also shows that the hostility component of the type A construct is the most coronary prone (Hecker *et al*., 1988). The connection between hostility and CHD has suggested that hostility and type A behaviour together predict elevated levels of plasma lipids and low-density lipo-protein cholesterol, which are risk factors for CHD (Weidner *et al*., 1987).

In a prospective study of 225 medical students (who filled out the Minnesota Multiphasic Personality Inventory (MMPI), which includes a measure of hostility), Barefoot and colleagues (1983) assessed the health status of these doctors after 30 years. It was found that there was nearly 5 times greater incidence of CHD among the doctors with a hostility score above the median than among those with a hostility score below the median. Also hostility predicted mortality from all causes. The number of deaths was 6.4 times greater among those with lower hostility scores. The findings are supported by Shekelle *et al.* (1983) that the mortality rate among males with low hostility scores (used MMPI) measured 25 years earlier, was 18% compared to a 30% rate among those with a high hostility score. Other studies suggested the existence of coronary prone personality with a core of impatience and other activities from the type A pattern (Lloyd and Gartell, 1983). Other researchers reported that type A individuals had an increased risk for several stress related illness, not just for CHD (Goldband, 1980; Irvine *et al*., 1982)

A study in the UK also does not support the original findings of the Western Collaborative Group Study. Type A behaviour (measured using the Bortner scale) did not predict major ischaemic heart disease events among a random sample of British males (age group 40-59 years) over a 6 year period (Johnston *et al*., 1987). Although validity and reliability are claimed, the use of the Bortner questionnaire might not be as satisfactory as the structured interview technique to classify type A behaviour.

Friedman and Booth-Kewley (1987) reviewed hundreds of studies of CHD and the type A construct using meta-analysis (meta-analysis is a technique which has been used to combine statistically results of many independent studies). They found a significant average association between the type A behaviour patterns and CHD. They concluded that it was more likely to be the subcomponents of type A behaviour such as anger and hostility that cause CHD rather than the whole type A behavioural pattern. When the type A behavioural pattern was measured by the structured interviews, the prediction of CHD was considerably better than when type A behavioural pattern was measured by the Jenkin's Activity Survey.

2.2 The Measurement of Type A and Coronary Heart Disease (CHD)

Type A behaviour pattern is usually measured by the Structured Interviews (SI) (Rosenman, 1978; Friedman and Powell, 1984). An interviewer has the subject respond to situations that elicit impatience, competitiveness and hostility in the SI. The subject's actual content of the response is less important than how the subject responds (e.g. subject's nonverbal cues). The psychometric properties of the most popular measures of type A behaviour are not well understood. The Jenkins Activity Survey (Jenkins *et al*., 1979), the Bortner (1969) type A scale, and the Framingham type A scale (Haynes *et al*., 1980) all imply (to assess) type A behaviour as an antecedent of CHD.

A type A questionnaire is shown in Figure 4.1 for your own assessment. This questionnaire, based on work by Bortner will give you an approximate idea of the extent of your type A behaviour. This questionnaire yields scores ranging from 14 to 154 and summing an individual's score gives an overall measure of type A behaviour, the higher scores being indicative of more type A behaviour. The average score is 84. For general practitioners, however, the average score is 95 (Rout and Rout, 1993).

3. THE HARDY PERSONALITY

The concept of 'hardiness' (stress resistant) was developed by two psychologists Suzanne Kobasa and Salvatore Maddi (1987). It is considered that 'hardiness' keeps an individual healthy despite stressful life events. Hardy personality theory states that 'among persons facing significant stressors, those high in hardiness will be significantly less likely to fall ill, either mentally or physically than those who lack hardiness or who display

YOUR BEHAVIOUR

Could you please circle one number for each of the 14 questions below, which best reflects the way you behave in your everyday life.

For example, if you are always on time for appointments, on question 1 you would circle a number between 7 and 11. If you are usually more casual about appointments you would circle one of the lower numbers between 1 and 5.

Casual about appointments	1	2	3	4	5	6	7	8	9	10	11	Never late
Not competitive	1	2	3	4	5	6	7	8	9	10	11	Very competitive
Good listener	1	2	3	4	5	6	7	8	9	10	11	Anticipates what others are going to say (nod, attempts to finish for them)
Never feels rushed (even under pressure)	1	2	3	4	5	6	7	8	9	10	11	Always rushed
Can wait patiently	1	2	3	4	5	6	7	8	9	10	11	Impatient while waiting
Takes things one at a time	1	2	3	4	5	6	7	8	9	10	11	Tries to do many things at once, thinks about what will do next
Slow deliberate talker	1	2	3	4	5	6	7	8	9	10	11	Emphatic in speech, fast and forceful
Cares about satisfying him/ herself no matter what others may think	1	2	3	4	5	6	7	8	9	10	11	Wants good job recognised by others
Slow doing	1	2	3	4	5	6	7	8	9	10	11	Fast (eating, things walking)
Easy going	1	2	3	4	5	6	7	8	9	10	11	Hard driving (pushing yourself and others)
Expresses feelings	1	2	3	4	5	6	7	8	9	10	11	Hides feelings
Many outside	1	2	3	4	5	6	7	8	9	10	11	Few interests outside work/home
Unambitious	1	2	3	4	5	6	7	8	9	10	11	Ambitious
Casual	1	2	3	4	5	6	7	8	9	10	11	Eager to get things done

Figure 4.1. Type A questionnaire

alienation, powerlessness and threat in the face of change' (Kobasa *et al*., 1985).

Hardiness involves three components: commitment, control and challenge (Kobasa, 1979). Commitment means the tendency to become intensely involved in whatever one is doing and believe in the value of that work (sense of self). Conversely individuals low on this commitment dimension tend to be alienated from work and from themselves. Control is defined as the tendency to believe as if one can influence the course of events encountered rather than remain powerless. Challenge involves the expectation that it is normal for life to change and gives opportunity for personal growth. These people look for stimulation and they see change as stimulating.

In stressful situations people with hardy personality tend to remain healthier than those who feel external forces make them powerless and alienated. It is suggested that people with 'hardy' personality tend to make positive and optimistic cognitive appraisal and this leads to the use of appropriate coping strategies. An example of the hardy personality and a contrast to this personality is given in box 4.2.

Box 4.2

Dr P has been a GP for 25 years in a group practice. He managed his surgeries to a satisfactory level, until he was faced with additional pressure. He experienced difficulty in coping and blamed his partners and the practice manager for his own problems. The changes in the NHS during the 1990s, which resulted in mounting paperwork, made his pressure exacerbated. He blamed the government for everything. He started drinking alcohol heavily, became depressed and finally resigned from the job. On the other hand, Dr K in the same practice was happy to see the changes, encouraged other partners to take on fundholding and felt in control of the situation. He arranged his work schedule according to the changes, was able to continue his recreational activities and felt happier. It is important to state here that Dr K was always committed to his work and found the changes challenging and stimulating. It is evident how Dr K's hardy personality helped him cope better than Dr P.

Research has shown that hardiness is a good predictor of health, even in the face of stressful life events (Kobasa *et al*., 1982, 1985). Kobasa *et al.* (1982) observed the positive buffering effect on a sample of lawyers. Hardiness is also associated with reduced diastolic blood pressure under conditions of laboratory test (Contrada, 1989). Hardiness buffers against burnout in intensive care nursing (Lambert and Lambert, 1987; Rich and Rich, 1987). Pollock (1989) believes that hardy individuals engage in more

active coping and seek more resources than the less hardy do. Collins (1996) examined the relation of work stress, hardiness and burnout among hospital staff nurses. It was concluded that promoting hardiness through staff development programmes may help to manage stress and reduce burnout in the health care setting. It is also suggested by other authors that when selection of medical (and/or nursing) students is undertaken the personality hardiness factor should be considered (Fain and Schreier, 1989)

4. LOCUS OF CONTROL

The concept of locus of control was developed by Rotter (1966, 1990), based on social learning theory. In Rotter's model individuals may be classified along an internal-external (locus of control) continuum. Locus of control refers to the extent to which the person perceives that he/she can control a given situation. The people at the internal extreme of the dimension view their behaviour and that of those around them, as being directly under their control. On the other hand, external people see their behaviour as influenced by events which are outside of their control and most events as dependent on chance, luck or fate.

Internality is associated with academic success and motivation to achieve (Rotter, 1966). Internal people are more confident that they can bring about changes in their own environment but the external feel powerless to bring about changes. Externals more likely to experience higher levels of anxiety, and report neurotic symptoms. It has been suggested by Davidson (1985) that men are more likely to be internalisers whereas women have a strong tendency to be externalisers. Externals appear to be easy going people, prone to persuasion and ready to accept information, whereas internals like to be in control and repel efforts aimed at controlling their behaviour (McKenna, 1987). However, Rotter (1966) suggests that both externals and internals are more psychologically maladjusted than the people scoring in the mid range. Internalised locus of control may be an important asset for primary health care professionals. An example of locus of control is given in box 4.3.

Studies have also shown that locus of control is linked to coping with stress and dealing with personal or family health problems (Donham *et al*., 1983; Ludenia and Donham, 1983). Internals expend considerable amount of mental energy in getting information that will enable them to influence events around them. These people squander more effort to cope with or achieve mastery over their personal, social and work environment (Phares, 1976). In addition, an internal locus of control has been found to be a major characteristic of the 'hardy personality' type discussed previously, who were

able to maintain good health despite high stress levels (Cooper, Cooper and Eaker, 1988).

Box 4.3

Mrs D, a practice manager with internal locus of control believes that she has control over what happens in the practice and that her input influences the doctors which ultimately influences her personal outcomes. She is confident that she can affect a change in the practice. Doctors and staff in their practice find it difficult to avoid principles agreed in the practice meetings. In contrast Mrs H, another practice manager in a neighbouring practice with an external locus of control believes that she has little control over the situations in her practice and ultimately the outcomes are determined by others or by chance. She experiences difficulty in rearranging the schedule during staff shortages although all have agreed to cooperate in times of need. We found from our interviews that she was given the authority but she does not know how to handle it. She feels that she has no power to change anything in her practice. She interprets the situation in this manner rather than the actual event. This shows that personality plays a role in determining personal outcome.

5. LIFE EVENTS

A considerable amount of research suggests that certain life event changes increase the likelihood of stress-related illness. Simply encountering changes, pleasant or unpleasant, desirable or undesirable, is believed to raise stress level. Much of the research carried out by Holmes and Rahe (1967), who attempted to discover what life-change situations are most stressful and what physical problems, if any, may develop because of stressful life-changes. They asked large groups of individuals to assign arbitrary points to various life events depending on how much readjustment each had required. The greater the number of points assigned to an event, the more stressful it is for the individual experiencing it. The list of events in the Holmes and Rahe's (1967) scale include items such as birth of a child, divorce, and death of spouse (see Figure 4.2 for example items).

Holmes and Rahe attempted to discover if life changes affect personal adjustment and health. They related the total number of points accumulated by individuals during a 12 months period to changes in their health. They found that the greater the 'stress points' individuals accumulated the greater their likelihood of becoming ill. In a series of studies they found high life change scores were related to the onset of illness within the following two-

year period. For example, studies have shown a positive correlation between mounting life change and sudden cardiac death (Rahe and Lind, 1971) and time of onset of myocardial infarction (Rahe and Paasikivi, 1971; Theorell and Rahe, 1975).

Listed below are some example items from the Holmes-Rahe social adjustment scale showing the events which occur in the process of living (for a full scale refer Homes and Rahe, 1967).

LIFE EVENT	POINTS VALUE	
Death of spouse	100	_____
Divorce	73	_____
Death of close family member	63	_____
Sacked from work	47	_____
Retirement	45	_____
Death of a close friend	37	_____
Trouble with boss	23	_____
Change in residence	20	_____
Change in eating habits	15	_____

Figure 4.2. Some examples from the Holmes-Rahe social adjustment scale

A number of life event lists using similar techniques have been developed, for example, the Psychiatric Epidemiological Research Interview Life Event Scale (Dohrenwend *et al*., 1982). Although there is an established fact that there is a link between changes in life events and the onset of illness there are some flaws in questionnaires which attempt to measure the effects of these changes. An important criticism of the questionnaires is that individual perceptions of the life events are not taken into account. Each item on the life event scale may have a different meaning for each individual being questioned. In fact items on any life event scale should relate specifically to the individual being questioned. Also everybody does not experience traumatic life events as studied by Holmes and Rahe. Research has shown that it is negative rather than positive life events that show substantial relationship with outcomes such as depression and psychosomatic symptoms (Thoits, 1983).

6. DAILY HASSLES

Hassles are "the irritating, frustrating, distressing demands that to some degree characterise everyday transactions with the environment" (Kanner *et al*., 1981). Lazarus *et al*., 1985, 1988) found that minor daily hassles (see

Figure 4.3 for example items) are important causes of stress. They developed a Hassle Scale, which contains 117 items that range from minor annoyances, to major problems on which people indicate the extent to which they have been hassled by common events during the past month. The greater the hassle individuals experience the poorer their psychological well-being.

Lazarus and colleagues report that the more hassle people experience the larger the number of symptoms and minor ailments they report (De Longis *et al*., 1988; Lazarus *et al*., 1985). Although traumatic life events have an adverse impact on health, daily hassles in life may sometimes have greater effect on health and well-being. The example in Box 4.4 shows how daily hassle can be stressful for individuals.

Box 4.4

Dr J lives in a valley 8 miles away from his practice. His driveway is very steep and he experiences difficulty in driving during winter months especially when there is frost or snow fall. One morning he was late getting up and was surprised to see heavy snow fall during the night. However he quickly got ready and got into the car. He wanted to take a chance and drove off. Unfortunately he got stuck in the snow on his driveway. He was always prepared for these kinds of situations but on this particular day he could not find the spade in its normal place. He started to panic as the time was almost 9 o'clock, when he should have started the surgery. In the past, in similar situations, he had used his second car (which is front wheel drive) but his wife had already left home for her work in that car. A neighbour with a four wheel drive had towed his car in the past, but he was away on holiday. Dr J panicked and became agitated. He developed palpitation, sweating and became irritable. He was swearing at his son, thinking that he may have put the spade somewhere. Then he calmed himself down and looked for the spade again. To his great relief he found it in the garage not far from its usual place although it was partially covered by a bin bag. He managed to clear the snow and was able to reach his surgery.

The example in the box 4.4 shows that Dr J could have avoided or handled the situation in a different way. Clearly Dr J could have put his alarm on to get up on time. Secondly, he could have kept his spade in a place where he could have found it easily and/or he could have kept himself calm while looking for the spade.

Performed poorly at a task
Criticised verbally
Interrupted while talking
Was stared at
Was embarrassed
Argued with someone
Had car trouble
Had difficulty in traffic
Misplaced something
Bad weather
Money problem
Heard bad news
Experienced narrow escape from danger
Was late for work/appointment
Exposed to upsetting TV show

Figure 4.3. Examples of daily hassles

7. UPLIFTS

Uplifts refers to "positive experiences such as the joy derived from manifestation of love, relief at hearing good news, the pleasure of a good night's rest and so on" (Kanner *et al*., 1981). It was found by researchers that more pleasant experiences (uplifts) can help to withstand the unpleasant feelings that arise from the experience of hassles. It is believed that uplifts 'buffer' the stress of hassles on the mental and physical condition of a person. Uplifts reduce the effects of annoying, frustrating problems, and assist as a source of peace, satisfaction and happiness (Kanner *et al.,* 1981). The following are some of the examples of uplifts: saving money, liking colleagues, or finding something presumed lost. It is suggested that illness is expected to be more likely to occur when hassles are frequent and uplifts relatively less (Lazarus and Cohen, 1977; Lazarus, 1980).

8. SOCIAL SUPPORT

Social support refers to the help or support from other human beings such as spouse, family, friends, neighbours, colleagues and acquaintances. Cobb (1976) suggests that individuals with social support believe they are loved and cared for, esteemed and valued, and part of a social network that can provide goods or services and mutual defence in times of need.

House (1981) defines social support as having four components:

1. Emotional support provides empathy, care, love, concern, sense of belongingness.
2. Instrumental support involves direct assistance, as when a person in need gets the help in goods or services (eg. money).
3. Informational support involves giving advice, suggestions or information which can be used in coping with a problem.
4. Appraisal or esteem support occurs through people's encouragement by approving the actions of the individual or by recognising them. This type of support helps to build the person's feeling of self-worth and being valued.

According to House (1981) social support can reduce stress and improve health in three possible ways:

1. Social support can directly reduce stress level. For example, support from work colleagues can reduce interpersonal pressure at work. This is illustrated in box 4.5.
2. Social support can improve health and well-being by raising resistance to illness.
3. Supportive relationships buffer the impact of stress on health and promote a sense of well-being. This is illustrated in box 4.6 where a woman doctor expressed her emotion when she was under stress.

In England, 16% of men and 11% of women report a severe lack of social support. Men and women in unskilled manual jobs are more than twice as likely to report this lack of support compared to those in professional employment (British Heart Foundation, 2000).

Box 4.5

Mrs. V is a practice manager in a group practice. Her husband is a police officer and works full-time. She has a good relationship with everyone at work. She has sympathetic ears and also gets sympathy from others at times of need. The doctors encourage her to develop new and innovative ideas and cooperate with her in implementing the ideas. She gets excellent help from her husband at home on all aspects of domestic work. If there is a problem at work she discusses it openly with her husband who gives her full support by listening to her and giving suggestions. She expressed that because doctors empower her in the workplace and with her husband's support at home she can cope with the pressure of the work after the accelerated changes in the NHS which has increased the workload in the practice tremendously.

Box 4.6

'I was angry and upset. I couldn't understand why one of my partners attacked me during the practice meeting. I burst into tears and I felt indignant. When I came back to my office to do the paperwork after the meeting I could not concentrate and continued sobbing. My senior partner came in and talked to me for some time in a sympathetic manner and was very supportive. He is a trained counsellor. Although my problems did not go away he made me think things clearly. I recovered rapidly and coped well'.

There are mainly two traditional models of social support - buffer model and direct effect model. According to the buffer hypothesis social support acts to protect people from stressful conditions i.e. social support is most influential under high stress (Cobb, 1976). The buffering hypothesis states that social support influences health by protecting the individual against the negative effects of higher levels of stress. The protective function is effective mainly when the individual encounters a higher level of stress. On the other hand, under little or no stress conditions, lesser or no buffering occurs. Individuals seek and report more social behaviour when stress increases (Dunkel-Schetter, Folkman and Lazarus, 1987; Schwarz, 1977). Women who had strong personal resources were more likely to receive instrumental support under high stress conditions but they were more likely to rely on their personal resources under low stress conditions (Hobfoll *et al.,* 1991). In addition, those with weak personal resources were unlikely to receive help when they needed it most.

Researchers view that social support is beneficial because it helps people to cope with stress. Cohen and Wills (1985) suggest that buffering works in two ways. First, those people with high levels of social support, when exposed to strong stressors are less likely to appraise the situation as stressful than those with low levels of social support. Second, social support can buffer the effects of stress by modifying people's responses to stressors after they have appraised the situation as stressful. For example, people with a high level of social support may talk to someone who could provide a solution to the problem. On the other hand, people with a low level of social support may not get this favour and therefore the negative effect of stress is more than for people with high social support.

In a study House (1981) measured the amount of support workers received from their supervisors, co-workers, spouse, relatives and friends. He found that support from supervisor and co-workers moderately reduced perceived stress at work. Support from spouse, relatives and friends, had little or no direct effect on the perception of stress at work or direct effect on health, but the support sources had buffering effects.

The direct effect hypothesis states that social support reduces stress regardless of the state of health, and is beneficial to health and well-being regardless of the level of stress. The hypothesis maintains that the invaluable effects of social support are similar under both high and low stressor intensities. Direct effect works in several ways (Cohen and Wills, 1985; Wartman and Dunkel-Schetter, 1987). For instance, people with high social support may have a greater self-esteem and sense of belonging than those with low social support. This produces a positive outlook which may be advantageous to people's health independent of the experience of stress i.e. by increasing resistance to illness. Also high social support may stimulate individuals to lead a healthy life-style, for example, a supportive relationship can help to establish healthy habits (good nutrition, exercise, help to prevent unhealthy habits like smoking or drinking alcohol excessively). This principle is followed in Weight Watchers, Alcoholics Anonymous and other self-help groups.

A study in California (Berkman and Syme, 1979) found that the death rate was higher among men who were unmarried, had fewer social contacts with friends and relatives and who were not church members. For women marital status did not have any effect, but close relationship patterns, and church membership were connected with lower death rates. Another study looked at the differences between Japanese and American cultures in terms of social support and stress. Japan has the lowest rate of coronary heart disease (CHD) in the world because of a lower intake of fat in the diet. It was found that the high-fat diet of Americans contributed substantially to their rate of CHD. There was an attempt to find out if there were other social factors involved in the much lower mortality rates due to heart disease among the Japanese. It was revealed that when Japanese people moved to Hawaii, the rate of CHD went up and it went up again when they moved to California (approximately double the rate in Japan). This difference could not be explained because the known risk factors of hypertension, serum cholesterol level and smoking were roughly the same in all these regions (Marmot *et al*., 1975). Matsumoto (1970) explained that the Japanese way of life may be generally more supportive. He suggests that there is an increasing emphasis on individualism in the west, whilst in Japan, collectivity orientations have been strongly maintained. The value system in Japan emphasises group welfare and group consensus. Marmot *et al.* (1975) suggest that the demanding and hectic lifestyle of America with a lack of social support are the reasons for the rising prevalence of CHD among Japanese living in California.

Researchers have shown that people who lack social support from family, friends and co-workers have more psychological and physical symptoms than those with support. It was found by Gore (1978) that

unemployed people who lacked social support had higher serum cholesterol levels, depression and illness compared to those with supportive relationship. Studies also revealed that a lack of support from spouse or partner was related to poor mental well-being, anxiety and depression among construction site managers (Sutherland and Davidson, 1989). It is well known that social support from the boss or co-workers could benefit individuals in the workplace (La-Rocco and Jones, 1978; House, 1981).

Several studies support the main effect model of social support. However, it is important to note that the actual sources of support, the type of stress, the observed outcome, class and gender will show whether a main effect or buffering effect will function.

Researchers found that the average effect of social support across stressful events is modest and sometimes it has a negative effect on the recipient (Sarason *et al*., 1990; Vaux, 1988). It was also found that social support can harm an individual's health (Suls, 1982). Members of the social network with a tendency to intrude may actually make things worse (Lieberman, 1982). Conflict within a relationship may add more to distress than to mitigate (Stephens *et al*., 1987).

9. COPING STRATEGIES

As yet, there is still confusion about the meaning and definition of coping and how it functions. Coping can be defined as "an individual's attempt to manage internal and external environmental demands or conflicts which tax one's resources" (Lazarus and Launier, 1978). Recently, Lazarus and Folkman (1991) suggested that "coping consists of cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". Coping is not a stable individual trait but is constantly changing as a function of continuous appraisals and reappraisals of the situation or the event.

According to Lazarus and Folkman (1991) there are two functions of coping, problem-focused and emotion-focused. Problem-focused coping involves taking direct action to change a stressful situation (for example, by seeking information about what to do or by confronting the individual who is responsible for the particular problem) or to reduce the demands of the situation or increase ones resources to deal with it. Emotion-focused coping attempts to reduce the emotional consequences of the stressful situation, it usually does not change the threatening condition but makes the individual feel better. In this case the individual avoids thinking trouble and deny the situation. On the other hand, emotion-focused coping such as denial can serve a positive function on a short term basis where direct actions are limited. Individuals rely on both types of coping (Lazarus and Folkman,

1991) to manage stressful situations. One form of coping may be preferred to the other depending on the situation. For example, problem-focused coping could be used when the outcome of an event is appraised as amenable to change, whereas, emotion-focused coping could be used when the outcome of an event is appraised as unchangeable (Folkman and Lazarus, 1980).

Some research indicates that individuals employ different methods of coping for different stress agents but others suggest that there are stabilities in coping (i.e. individuals employ the same or similar modes of coping over a period of time). Gorzynski *et al.* (1981) studied how 30 patients coped with the threat of breast biopsy. These patients were studied earlier by Katz *et al.* (1970). It was established by Gorzynski and colleagues (1980) that the 'psychological defence patterns' were stable over time and also hormonal secretions were more or less stable. Kobasa (1979) also suggests consistencies in coping from her studies. However, Lazarus and Folkman (1991) argue that there is both stability and change in coping.

Folkman and Lazarus (1988) provide a questionnaire to assess the coping process. The items include problem-focused categories such as 'talk to someone to find out more about the situation' and emotion-focused categories such as 'didn't let it get to me'. They identified 8 kinds of coping using the revised 67 item "ways of coping" questionnaire (Folkman and Lazarus, 1985; Folkman *et al.,* 1986). Two kinds are problem-focused, one is confrontative and interpersonal, the other emphasises planful problem-solving. Six others are primarily emotion-focused. These include distancing, escape avoidance, accepting blame, seeking support, positive reappraisal and exercising self-control over the expression of feelings. Figure 4.4 contains a sample of items from the above scale.

According to Pearlin and Schooler (1978) coping can be categorised into three parts: responses that change or modify the situation; responses that change the meaning of the situation and responses that manage or control the negative consequence of a stressful event. The authors point out that the first category of response is less frequent because of the individuals lack of ability to change the situation. The second category of responses act cognitively to 'neutralise' the stressor. The final category of coping responses aim to decrease the negative impact of a stressful event. Pearlin and Schooler's data showed that it was more difficult to manage occupational stressors than to manage life stressors (for example, marriage and parenting). Ross and Altmaier (1994) suggest that in the area of occupational stress actual control is more difficult to exert, and hence the best coping strategies are those which emphasise dealing with events rather than changing them.

Please think about the events or situations which have been stressful for you during the last three months. By 'stressful' we mean a situation which was difficult or troubling to you, either because it made you feel bad or because it took effort to deal with it. How do you usually cope with these situations?

Please circle the appropriate number.

1 = Strongly disagree
2 = Moderately disagree
3 = No feelings either way
4 = Moderately agree
5 = Strongly agree

1. Blamed myself	1 2 3 4 5
2. Kept my feelings to myself	1 2 3 4 5
3. Wished I could have changed what happened	1 2 3 4 5
4. Got mad at the people or things which caused the problem	1 2 3 4 5
5. Let my feelings out in some way	1 2 3 4 5
6. Just concentrated on what I had to do next - the next step	1 2 3 4 5
7. Talked to someone about how I was feeling	1 2 3 4 5
8. Didn't let it get to me; refused to think about it too much	1 2 3 4 5
9. Went on as if nothing had happened	1 2 3 4 5
10. Avoided being with people in general	1 2 3 4 5
11. You went over the problem again and again	1 2 3 4 5
12. Talked to someone who could do something about the problem	1 2 3 4 5

Figure 4.4. Ways of coping

Individuals can exhibit different coping styles. Some may confront the problem directly by gathering information and taking direct action. Others may react suddenly without thinking through the consequences of the problem. For example, in box 4.7 problem solving worked out right for Dr M but disastrous for Dr H.

Box 4.7

Dr M had seen a patient as an extra (i.e. patients seen as emergency who come without an appointment) during his morning surgery who complained of heartburn and excessive flatulence. He was diagnosed to have indigestion and was prescribed antacids. At 4 PM the receptionist rang through to Dr M to inform him that the patient he had seen earlier had died suddenly. Dr M kept himself calm and continued the consultation with his current patient as he was half way through. He made a telephone call to the patient's relatives and extended his condolences after he had finished the consultation with his patient. Then he continued to see the rest of the patients in the surgery as the surgery was fully booked. At the end of the surgery Dr M asked the receptionist for the details of the conversation with the patient's relatives and gathered all the information. Then he went to the patient's house to meet the relatives of the deceased and handled the situation in a calm and confident manner.

On the other hand, Dr H, in the same practice went through a similar situation. He saw a patient with a minor problem and the patient died suddenly the next day but he dealt with the situation in a different manner. He panicked after hearing the death news of the patient and immediately left the surgery to see the relatives of the deceased. His surgery was fully booked. His patients were waiting in the waiting room until he came back from the deceased patient's house an hour later after all the hassles. The patients were impatient after waiting for a long time in the waiting room. There was chaos in the surgery. He was unable to concentrate in the surgery and had to ask some of his patients to come back for the next available appointment. Some of them complained to the receptionists. The receptionists tried their best to keep the situation under control but without success. They were also under stress because the waiting room was too full and there was hardly any space to move around.

Coping behaviour can be described as either adaptive or maladaptive. It was revealed from some research that the immune system may be adversely affected by maladaptive coping strategies. In a study of women attending breast screening clinics it was found that women with a tendency to keep 'emotional material' buried are significantly more at risk from breast cancer than those who express their feelings, seek help and acknowledge the underlying stress related event (Cooper *et al.,* 1986).

10. GENDER

With rapid change in the society the role of women is radically changing. Today, 70% of married women work and over 41% of women with a child under five years of age are in employment, compared with 24% in 1983 (Social Trend, 1991). Women in contemporary society still face discrimination that add stress to their working conditions. Davidson (1990) has pointed out that despite the sexual discrimination and equal-pay legislation, there is still a gap between men's and women's earnings, and the law still sanctions unequal treatment in the areas of pensions and retirement. It is important to understand the gender-stress relationship at the work place. In the study of stress and women the most popular topics have been the role-strain, dual role conflict, and role overload which presumed to affect married working women (Long and Porter, 1984). Despite working full-time, women are often expected to meet domestic commitments. There is some evidence that conflicting demands from work and family can be stressful. Now

women are developing the same stress related illnesses as men. For example, Davidson and Cooper (1983) have shown that certain stressors in society adversely affect women more than men; such as lack of resource, support for working mothers, expectation of child rearing practices, and male attitudes towards working women. Karasek *et al.* (1987), in a Swedish study, found that working women showed higher levels of exhaustion, headaches, dizziness, depression, and respiratory problems than the men.

11. AGE

Age may play a moderating role in the perception of stress. For example, Theorell (1976) in a study of construction workers found "the measure of discord among employees to be much higher in the 41-56 age group than in the 56-65 year olds". Other researchers found that mid-life crisis increases one's sensitivity to stress regardless of occupation (McLean, 1979). The GPs continue to take 24 hours responsibility for their patients throughout their career irrespective of their age. In fact the average GP spends 73 hours working per week (BMA, 1987). As Chamber states, "The ageing process makes all this more difficult to manage because of increased fatiguability and likelihood of physical ailments" (Chamber, 1989). These fatigued doctors are likely to make errors and perform less than their full potential.

12. ETHNICITY

There are several problems for ethnic minorities in the workplace which create additional stress for them. For example, selection and recruitment processes are biased against ethnic minorities at work. In addition, lack of role models or mentors in the workplace can create stressful situations for minority groups. There is evidence of racial discrimination against ethnic minorities in the work environment (Smith, 1976). In our interview sample, one of the receptionists in a doctor's surgery felt discrimination for her colour by her colleagues and patients. This may promote feelings of inadequacy, low morale, poor motivation and low-self esteem which ultimately will create stress.

13. CONCLUSION

A large number of complex factors such as personality, coping strategies adopted, past experience, ethnicity, gender, social support, needs and wants

are responsible for an individual's vulnerability to stress. In this chapter we have reviewed the personality types such as type A coronary prone behaviour, locus of control, hardy personality and other conditioning variables such as age, gender and race. The research reviewed suggests that personality does play a part in the stress-health relationship. We considered both positive and negative components of various personality constructs. This information can be useful for management training, health promotion and counselling programmes. This may also be useful for GP practices to develop selection processes aimed at identifying those professionals who may be predisposed to stress-related illness. It is important to have a basic understanding of the influence of personality on stress-health relationship. This will help in developing self-awareness and increasing feelings of control which are critical components in the stress-resistance process. In addition to personality, coping strategies and social support are reviewed because these moderator variables affect stress vulnerability. In dealing with stress it is important to recognise the potential sources of stress, and understand the attributes of the person that will mediate the cognitive appraisal and subsequent responses to that event. In the next chapter consequences of stress will be discussed.

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Chapter 5

CONSEQUENCES OF STRESS

It is difficult to estimate the cost of occupational stress because of several problems inherent in the effects of stress. Not only the individual suffering from stress pays a high toll, but his family and the organisation suffer as well. Stress produces a number of negative consequences, especially physical and mental ill health. In this chapter, we shall consider the effect of stress in terms of cost to the individual and to the organisation. This will include a brief review of literature on physical and mental health. Then behavioural response to stress, such as alcohol consumption and smoking will be discussed. And finally job satisfaction, absenteeism and burnout will be considered.

1. COST OF STRESS

It is illustrated by Rees and Cooper (1990) that approximately 1 in 8 of workplace subjects have stress symptoms of equal magnitude to patients attending clinical psychology out-patient clinics. In the BIS Applied Systems Survey of Stress in the British manufacturing industry it was revealed that 86% of managers felt they were suffering from stress, yet nearly three quarters of the companies provide no support (Tiernan, 1989). Often the smaller organisations, with less than 500 workers, fail to provide access to occupational health services for the employees (BMA, 1992). It was estimated (Industrial Review, 1986) that 30 million working days a year in Britain are lost through psychoneurosis, excluding psychosomatic complaints. The Confederation of British Industry (CBI) estimates that 6.7 million working days were lost in 1999 and the Health and Safety Executive (HSE) suggests that stress related illness costs the UK 7 billion pounds each year (Baker and Saunders, 2000).

Several 'caring' professionals are prone to occupational hazards due to the stress of the job. For example, doctors, dentists, nurses, and health technologists appear to "have higher than expected rates of suicide and alcohol/drug abuse" (Maslach and Pines, 1997). Studies have shown that there are links between job stress, dissatisfaction, reduced mental well-being and poor self-concept (Kornhauser, 1965; Lock, 1976). Other researchers have found that job overload, role conflict and role ambiguity contribute to numerous pointers of physiological and psychological tension, for example, increased heart rate, raised cholesterol, blood pressure, job dissatisfaction and smoking (French and Caplan, 1973). Stress can be manifested by other illnesses such as panic attacks, phobic states, anxiety and diabetes (Sapolsky, 1994). It has been reported that 48% of premature deaths in Britain are due to lifestyle and stress related illness (Palmer, 1989). The immune system is also affected by psychosocial stressors (Cohen and Herbert, 1996).

In a review article Ganster and Schaubroeck (1991) demonstrated that job stressors can have an effect on health. However, Beehr and Newman (1978) reviewed studies on job stress and summarised that three negative personal outcomes result from it: physical, psychological and behavioural symptoms. Table 5.1 summarises the symptoms that show the onset of work stress from the literature.

Table 5.1. Symptoms of stress

Physical symptoms	**Mental symptoms**	**Behavioural symptoms**
Erratic breathing	Irritability	Increased alcohol consumption
Tense muscles	Feeling of hopelessness	Increased smoking
Restlessness	State of anxiety	Increased or decreased eating
Diarrhoea or constipation	Feeling of depression	Nail biting
Nausea	Inability to concentrate	Hair pulling
Sweaty palms	Difficulty in making decisions	Increased or decreased sleep
Frequent indigestion	Loss of sense of humour	Social withdrawal
Headaches	Undue tiredness	
Dry mouth	Feeling of guilt	
Shaky hands	Irrational fear	
Chest palpitations	Increased moodiness	
Dizzy spells		

Some primary care professionals suffer from physical and/or mental symptoms of ill health, whilst others manifest stress in behavioural terms through increased smoking or drinking. The range of symptoms that primary care professionals suffer was revealed from interviews carried out by us during 1993 and 1994. Some examples are given below:

General practitioner:

"I feel that people's expectations have risen to such a level that I find it difficult to cope. Recently one of my patients was given a prescription for a morphine injection during the morning. One of her relations requested a visit at 10 pm because they hadn't collected the injection from the chemist and the patient was in pain. I had no morphine with me at that moment but I offered pethidine instead. Her relative insisted on morphine, which was not available at that time even through emergency chemists. As a result of her insistence the patient did not take any pain killer and suffered from pain. A few days later I received a letter from the FHSA that a complaint had been lodged against me because of my unsympathetic attitude, and the hearing will take place next month. I know that I've done nothing wrong but I have been feeling very uneasy since I received the notification. I realise that I am losing concentration during surgery consultations. I have no patience to listen to patients' symptoms. When I return home at the end of the day I get irritable with everybody at home. I do not like to play with my children. I can't sleep well. I have nightmares thinking of the outcome of the hearing. I had given up drinking and smoking six years ago but started again. I find it difficult to discuss my problems with anyone".

Practice nurse:

" I am very happy in my job but there are times when I feel pressurised especially before the end of the month, when all the paperwork must be completed. I get palpitations and frequent migraine headache".

Receptionist:

"The computer system in the surgery has been changed three times in the last two years. I am still struggling to get the hang of it. When I am given something to do I go really slow and can't finish the job. I panic, my hands sweat, I feel restless and get a dry mouth".

Practice manager:

"I was quite happy as a senior receptionist. Since I became the practice manager, I initially felt happy and proud of myself but now I think I can't cope with the job, due to all these added responsibilities. I get frequent stomach pain and excessive wind. I am losing concentration and feel tense all the time. My bowels have become loose. My doctor said that I have developed Irritable Bowel Syndrome".

District nurse:

"I have just come back to work after being off sick for 5 months. It all started when we had a new manager who I found to be the most awkward person to work with. She changed my territory three times in three months and insisting on a lot of unnecessary paperwork. I felt frustrated and undervalued. I didn't enjoy my job any more. I felt withdrawn, suffered from stress and lost weight. I feel okay now with treatment".

Community psychiatric nurse:

"I hardly get any free time nowadays. I have been asked to write reports on each and every patient that I deal with. There is no secretarial help: I feel stressed due to increasing work pressure. I feel tired all the time. I have no appetite. I have lost my sense of humour and find it difficult to socialise]".

2. STRESS AND PHYSICAL ILLNESS

There are several physical diseases which are caused or aggravated by persistent stress. Some of the common stress disorders are described in this chapter. Psychosomatic disorders are diseases which are believed to have psychological factors as their causative agents. However, specific psychosomatic diseases such as ulcers, rheumatoid arthritis, asthma and headaches are linked to psychosocial factors (Friedman and Booth-Kewley, 1987). Stomach ulcer is often caused by increased acid secretion into the stomach (known as hyperacidity) and this is thought to be partly associated with psychosocial factors such as hostility, anxiety and rage (Engel *et al.*, 1956; Weiss, 1984; Wolf and Wolf, 1943).

Since heart disease and stroke are the most common causes of death (Table 5.2), we will only concentrate on cardiovascular disease.

Table 5.2. Causes of death in the UK

Heart disease	45%
Strokes	12%
Cancers	22%
Respiratory disease	12%

Source: Fry and Horder, 1994

2.1 Cardiovascular Disease

Cardiovascular disease (CVD) is the most prominent killer among industrial nations. In the UK, over 250 000 deaths a year were due to CVD (Office for National Statistics, 1998). Circulatory diseases which include heart attacks and strokes were among the top causes of death in 1992, among males and females in England (Table 5.3). There is strong evidence that hypertension and heart disease are linked to stress. The incidence of myocardial infarction (MI) is 300 000 each year in the UK (British Heart Foundation, 1999).

The impact of coronary heart disease (CHD) is very high and accounts for 2.5% of total NHS expenditure, resulting in the loss of 35 million working days each year (Public Health Common Data Set, 1995). Recent figures show that CHD costs the NHS £1.6 billion per year and the overall cost of CHD to the UK economy is £10 billion per year (British Heart Foundation, 1999). The Standardised Mortality Rates (SMR) for CHD and stroke for the UK, the USA and Australia can be seen in Figure 5.1. Compared with Australia and the USA, the UK has the highest SMR for CHD and stroke. In 1984, mortality rates for CHD for the 12 European Community (EC) countries differed enormously. At that time, the mortality rate for the UK was the second highest rate in the EC after Ireland. Since 1970, there has been a decline in mortality rate in Belgium and the Netherlands, but there has been an increase in mortality rate in Greece. Currently CHD is the most common cause of premature death in the UK: 26% premature deaths in men and 16% of premature deaths in women are from CHD. Recently the UK death rate from CHD was among the highest in the world showing over 140,000 deaths per year (1 in 4 male and 1 in 5 female deaths) (British Heart Foundation, 1999). In 1991, 13% of males were classified as 'untreated' hypertensive and 4% as 'treated' hypertensive in England. For females the comparative figures were 11% and 6% respectively (Department of Health, 1995).

Several studies in the area of occupational stress and health have attempted to determine which working conditions are associated with CHD risk. For example, the psychological demands of the job, autonomy, job satisfaction, work overload and low levels of control over one's job seem to be particularly important in affecting stress levels. Alfredson *et al.* (1982) found that increased risk of myocardial infarction was associated with occupations characterised by hectic work and low levels of control over work pace and degree of variety.

Table 5.3. Selected causes of death: by sex and age, 1992

United Kingdom	Percentages and thousands						
	Under 1	1-14	15-39	40-46	65-79	80 & over	All ages
Males							
Infectious diseases	4.8	5.1	1.7	0.7	0.4	0.3	0.5
Cancer	1.0	17.3	13.5	34.3	31.6	20.9	28.0
Circulatory diseases[1]	4.0	4.0	10.7	43.8	48.2	47.3	45.5
Respiratory diseases	11.9	5.1	3.4	5.3	10.3	16.7	11.1
Injury and poisoning	17.6	34.2	52.7	6.6	1.3	1.2	4.2
All other causes	60.8	34.2	18.0	9.3	8.3	13.5	10.7
All males (=100%) (thousands)	1.1	1.3	10.2	58.4	140.9	94.9	306.6
Females							
Infectious diseases	4.3	4.8	1.9	0.6	0.4	0.3	0.4
Cancer	1.5	18.0	33.3	51.8	30.6	14.2	24.3
Circulatory diseases	5.6	4.4	10.7	26.7	46.6	52.3	46.6
Respiratory diseases	10.6	5.6	3.4	5.8	9.2	13.7	11.1
Injury and poisoning	16.8	25.8	28.9	4.0	1.4	1.4	2.2
All other causes	61.3	41.4	21.8	11.1	11.8	18.0	15.3
All females (=100%) (thousands)	0.7	0.9	4.8	36.4	111.5	169.9	324.2

[1] Includes heart attack and strokes

Source: Office of Population Censuses and Surveys; General Register Office (Scotland); General Register Office (Northern Ireland). (cited in Social Trends, 1994)

The most influential theory of job stress is Karasek's (1979) demand-control model or job decision latitude model. In his two-dimensional demand-control model, Karasek (1979) demonstrated that high job demand and low decisional control are associated with increased CHD. It is important to note that these are psychological demands and not physical demands. The demand-control model was tested by Fox *et al.* (1993) by employing both objective and subjective measures in a sample of nurses in a single institution. They found that neuro-endocrine arousal and other outcomes were explained by the interaction of objective and subjective workload demands with perceived control. The interaction of these variables predicted carry-over effects after work. The significance of these findings is that they showed heightened physiological arousal elicited by work demands which can persist after finishing the working day (Daniel *et al.*, 2000). This group of nurses were studied in follow up research by Ganster *et al.* (1999) and it was revealed that the elevated after-work physiological response of the nurses predicted the healthcare cost for the next five years.

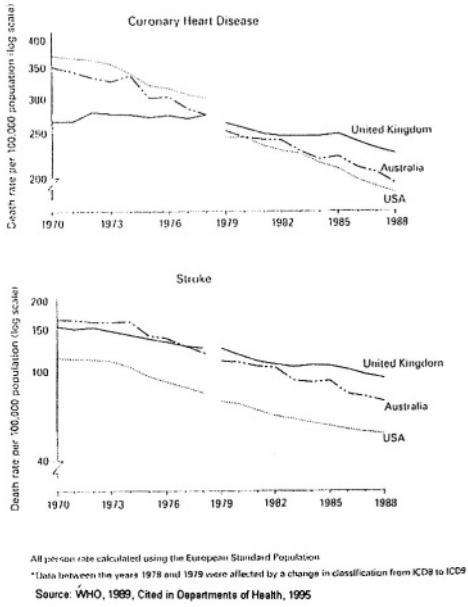

Figure 5.1. UK, USA and Australian mortality comparisons 1970-1988

Several other studies have demonstrated an 'inverse social gradient' in mortality from CHD among civil servants in England (Bosna *et al.*, 1999; Marmot *et al*., 1997). The CHD rates among highest grade employees were significantly lower than those in the lowest grades (clerical and office support staff). Out of all the factors examined, personal control in the work place was the largest contributor to this 'social gradient' (Daniel *et al*., 2000). Karasek's job demand-control model has been tested in several other populations and successfully predicted CHD and mortality in two studies of male Swedish workers and in numerous studies in the USA (Karasek *et al*. 1981; Tyroler *et al*., 1987).

Haynes and Feinleib (1980) re-analysed data from the Framingham Heart Study (cited in chapter 4) and discovered that working women (i.e., women who had been employed outside the home for more than half their adult years) were not at significantly higher risk of CHD than housewives. However, the incidence of CHD was higher among working women with children than housewives and working women without children. The likelihood of CHD increased linearly with the number of children for working women, but not for housewives. The working women perhaps had high family demands contributing to CHD. In addition, clerical workers and

women with unsupportive bosses were more likely to develop CHD. These women probably had low control over their jobs. The job demand-control model was tested by LaCroix and Haynes (1986) in the Framingham Heart Study. In the mid 1960s around 900 males and females were observed over a period of 10 years for the development of ischaemic heart disease. It was found that both males and females in high strain occupations were approximately one and a half times more at risk of developing ischaemic heart disease.

In the realm of occupational stress, researchers have found that employees with unsatisfying yet demanding jobs, requiring a great deal of responsibility, have a higher incidence of CHD than do those whose jobs are less demanding. Stress, especially when accompanied by anxiety, is manifested through the cardiovascular system (Matthews *et al.*, 1986). In determining the effect of stress on CHD, it is important to note how a person reacts to different stressors in the environment. In this context we have examined the type A behaviour pattern and CHD in chapter 4.

Studies demonstrated that death from heart disease has been more common amongst doctors than in the control population in the USA (Dickinson and Martin, 1956). On the other hand it was found by Doll and Peto (1976) that deaths from heart disease had been declining in British doctors, and that doctors under 54 years old were less likely to die of ischaemic heart disease and myocardial degeneration than the general population.

There are several known risk factors associated with cardiovascular disease, ranging from psychosocial to biological. The cumulative effect of known risk factors does not explain all the variance in cardiovascular occurrence, and hence there may be other unknown factors which contribute towards the occurrence of the disease. We have only considered briefly the link between stress and CHD.

3. STRESS AND MENTAL HEALTH

Recently it was found that 18% of women and 13% of men have high levels of psychological distress as measured by the General Health Questionnaire (GHQ12). People with low incomes and those who live in London are more likely to report a high GHQ score (British Heart Foundation, 2000). Of the 328 million days lost from work in Great Britain in 1984-5, 53 million (16%) were due to mental health causes (Cooper *et al.*, 1988). In a large organisation Zaleznik *et al.* (1977) studied 2131 employees. It was found that 24% reported suffering insomnia, 21% restlessness and agitation, 19% fatigue, 16% felt their work adversely

affected their health, 13% felt the need to withdraw and 11% were worried about having a nervous breakdown. The researchers reported that due to illness or conflict, 15% of the employees were not able to complete the questionnaire, which might have underestimated the prevalence rates of stress reactions.

In an epidemiological study Murray (1977) studied the admissions to, and discharges from, all hospitals in Scotland of male doctors aged 25 years or over. All male non-doctors of social class 1 were compared with the male doctors. The overall mean annual first admission rate was 203 per 100 000 for the non-medical males of social class 1 and 449 per 100 000 for male doctors. It was found that the rates were higher among doctors for all diagnostic categories except personality and behaviour disorders, but there was no significant difference between doctors and non-doctors for schizophrenia, and other psychoses and neuroses. However, the study found that the rates for drug dependence, alcoholism and depression were significantly more common amongst middle aged doctors than middle aged non-doctors.

Government statistics show explicitly, suicide rates are higher for doctors than other professionals such as lawyers, school teachers, and the clergy (Bennet, 1982). The 1970-1972 Decennial Supplement (HMSO, 1975) revealed that the major causes from which doctors are more likely to die than the general population are suicide (SMR - 335), cirrhosis (SMR - 311), and accidents (SMR - 180). In Britain, doctors are nearly 3.5 times more likely to commit suicide than the general population. Studies have shown that male GPs reported significantly higher levels of anxiety and lower levels of job satisfaction than other normative groups (Rout and Rout, 1993, 1994). In a sample of GPs Levita (1995) found that 68% reached or exceeded the GHQ threshold score (i.e. the score that can be interpreted as indicating high strain). A substantial proportion of GPs suffered from psychological (worry, unhappiness, depression) and physical (lack of sleep, decrease in working activity) strain. Another study showed that male GPs had worse anxiety and depression than the patients that they treat (Sutherland and Cooper, 1992). Rees and Cooper (1990) investigated stress and health among health service employees and found that health workers reported significantly greater pressure at work and higher rating of physical and mental health compared with white collar and professional workers in industry.

Caplan (1994) surveyed 81 hospital consultants, 322 GPs and 121 senior hospital managers. GPs were more likely to be depressed than managers and there were no significant differences between hospital consultants and GPs. GPs were significantly more likely to show suicidal thoughts than consultants but not managers. However, the level of stress, anxiety and depression in consultants, GPs and managers in the NHS seemed to be high.

In a national questionnaire–based study, Ramirez *et al.* (1995) reported that the prevalence of psychiatric disorder in consultant oncologists was 28% and they had equivalent levels of emotional exhaustion and low personal accomplishment to those found in American doctors and nurses (Maslach and Jackson, 1986).

Appleton *et al.* (1998) assessed the levels of psychological symptoms, job satisfaction and subjective ill health in GPs in Leeds, UK. They found that 52% of the GPs showed high levels of psychological symptoms and 60% felt that their physical health had been affected by their work. King *et al.* (1992) sent questionnaires to hospital doctors in London to study past and current emotional distress, sources of stress, type of help sought and perceived outcome of that help. They found that the doctors were subject to high levels of personal distress and those doctors who experienced emotional distress had difficulty in disclosing this to anyone outside their immediate family and friends. However, the physical health of doctors appears to be better than their mental health (BMA, 1992, 1993).

Evidence suggests that nursing has one of the highest rates of suicide and psychiatric outpatient referrals (Jones, 1987). Tyler and Cushway (1992) reported that the General Health Questionnaire caseness measure (a good predictor of psychiatric admission) is consistently found to be above the threshold for 30 % of nurses sampled across different populations of general nurses.

4. STRESS AND JOB SATISFACTION

A recent study found that perceived stress predicts job dissatisfaction (Koleck *et al*., 2000). Physical and mental ill health reduces the satisfaction obtained from the job and may reduce job performance. Studies have shown links between job satisfaction and CHD (Jenkins, 1971), which is detrimental to the aims and objectives of the workplace. French and Caplan (1970) established that poor relationships with other members of the organisation could result in psychological strain in the form of lower job satisfaction. Low job satisfaction is related to non-participation in decision making, inability to provide feedback and lack of recognition of good performance (Kasl, 1973).

Job stress has been found to have a direct effect on dissatisfaction among GPs (Rout *et al*., 1993, 1996) and offshore oil personnel (Ulleberg and Rundmo, 1997). Doctors were dissatisfied with their work due to heavy workload, lack of personal free time and being on call (Mawardi, 1979). Low job satisfaction was associated with higher levels of prescribing certain drugs with potential adverse side effects in GPs (Melville, 1980). In a study of family doctors, time pressures and financial costs of operating a practice were the

major sources of job dissatisfaction (McCraine *et al*., 1982). A strong positive relation between exhaustion and dissatisfaction was observed among care givers (Bellani *et al*., 1996). Job dissatisfaction was significantly related to reported stress from organisational features (i.e. staff relations and resources) rather than factors more directly associated with nursing (Guppy and Gutteridge, 1991).

5. ALCOHOL

The sensible limits for drinking endorsed by the Department of Health and medical authorities were 21 units for men and 14 units per week for women (1 unit being 1 standard drink, ½ pint of beer, a glass of wine or a single measure of spirit). The Department of Health reviewed the alcohol drinking issue in December 1995 and raised the sensible limit to 28 units a week for men and 21 units a week for women. This was interpreted as meaning that the Government had increased alcohol consumption to 28 units a week for men and 21 units a week for women. The Government denied this interpretation and proposed a daily limit of 3-4 units for men and 2-3 units a day for women. Medical and scientific bodies argued that the old 21/14 limits should not have been raised. The health survey for England in 1993 classified 9% of men and 5% of women as 'problem drinkers', who drank more than occasionally, perhaps due to psychological and physical dependence. The highest proportions of 'problem drinkers' were in the 25-34 age group (13% for men and 7% for women).

In the UK, in 1998, 39% of men drank more than 4 units of alcohol and 21% of women drank more than 3 units of alcohol on one day in the previous week. In 1996 the mean weekly alcohol intake was 16 units for men and 6.3 units for women. In 1996, 27% of men and 14% of women aged 16 and over were drinking more than 21 and 14 units a week respectively (Department of Health, Oct 1999). Overall 38% of men and 21% women in the UK consume more alcohol than the daily recommended limits (British Heart Foundation, 2000). Alcohol consumption varies markedly with social class in men and women. The proportion of men and women consuming alcohol is highest amongst those in the employers and managers roles (Table 5.4). Professional women are three times as likely to drink more than the recommended limit than those in manual jobs (British Heart Foundation, 2000).

The cost of alcohol-associated illness in the UK was estimated at £1687 million in 1986 (Marmot and Brunner, 1991) and the overall social cost was around £2.5 billion during the 1990s (Health Update, 1993). It was

estimated by the Health Education Authority (1989) that approximately over eight million working days are lost each year due to alcohol consumption.

In a number of studies different occupational groups showed varied alcohol drinking problems. For example, Hingley and Cooper (1986) found that 8% of nurse managers consumed alcohol on a daily basis, compared to 4.8% of the female population. In a study of oil rig workers, Sutherland and Cooper (1986) reported that 61% often consumed alcohol during onshore leave as a method for stress relief.

Table 5.4. Heavy cigarette smoking[1] and consumption of alcohol above sensible limits[2]: by socio-economic group[3] in Great Britain, 1990

	Males %		Females %	
	Smoking	Alcohol	Smoking	Alcohol
Professional	5	26	6	14
Employers and Managers	12	30	7	14
Intermediate and junior, non-manual	8	26	7	11
Skilled manual	17	28	11	9
Semi-skilled manual	18	26	12	9
Unskilled manual	22	26	13	6
All socio-economic groups	14	27	9	11

[1] 20 or more per day
[2] 22 units or more for males, and 15 units or more for females, per week
[3] adults aged 16 and over
Source: General Household Survey (cited in *Social Trends*, 1994)

In the USA, Margolis and colleagues interviewed 1500 employees in a variety of occupations, and discovered a positive relationship between escapist drinking and a number of specific stressors (Margolis *et al.*, 1974). Those experiencing high job stress drank more than those in occupations where there was low job stress. It is argued by some authors that the presence of high levels of stress at work can cause some individuals to resort to heavy drinking as a coping technique (Hurrell and Kroes, 1975). However, it is not clear why some people under stress become alcoholics and others control their alcohol intake. It is suggested that the influence of genetic factors plays a significant part in severe alcoholism among men. Sutherland and Cooper (1990) suggest that a genetic component could consist of certain characteristics that play a significant part in alcohol consumption and tolerance to alcohol. However it is important to make a distinction between severe alcoholism and problems with drinking.

It was found that the first admission rate in Scotland for alcohol dependence was 2.7 times higher among doctors than among social class 1 controls (Murray, 1978). A nationwide survey of 1278 medical students

found that in a typical week 17% of respondents exceeded the recommended limits for sensible drinking (Ghodse and Howse, 1994). In addition, the study found that 10% of the respondents were current smokers and 10% were ex-smokers and 37% of the respondents used other drugs. Several studies showed that medical professionals are especially susceptible to cirrhosis, suicide, poisonings, accidents, and alcohol addiction (Allibone *et al*., 1981; Bennet, 1982; Murray, 1978; Lloyd, 1982). In a British review of psychiatric illness in doctors, Rucinski and Lybulska (1985) concluded that the most common diagnoses are alcoholism, drug addiction and depression. However, drug and alcohol abuse problems appear to be more common in male doctors (AMA, 1978). For example, Gomberg (1979) reported that there were approximately 4 to 5 male alcoholics for every female alcoholic. It is worth mentioning that doctors do not like to discuss stress with colleagues and peers often ignore the symptoms of stress in their colleagues (Rawnsley, 1985; Symons and Persaud, 1995). The problems found here may be the tip of the iceberg. It was estimated that there may be as many as 3000 practising GPs in the UK who are alcoholics, while many others may show other signs of stress (Allibone *et al*., 1981). It was revealed that 13 000 – 22 000 doctors in the USA were alcohol dependent at some stage in their career (Bissel and Jones, 1976). A study of health and lifestyle of GPs and teachers showed that self-medication was common among GPs (Chamber, 1992).

However, alcohol consumption appears to be associated with a relatively low risk of CHD in a number of studies (Marmot, 1984). In two prospective studies (The US Nurses Health Study and the Health Professionals Follow up Study), alcohol consumption was associated with a significant reduction in risk of CHD (Stamfer *et al*., 1988; Rimm *et al*., 1991). Nevertheless, other longitudinal studies show higher total mortality in heavy drinkers, but predominantly due to causes other than CHD (Boffetta and Garfinkel, 1990). Alcohol drinking can adversely affect cardiovascular disease through its effect in increasing blood pressure at intakes above 4 units of alcohol a day. This could partly account for the increased risk of stroke (Department of Health, 1995). Therefore, the risk of alcohol consumption outweighs the benefit.

6. SMOKING

In the UK, large numbers of deaths are due to smoking related diseases, such as lung cancer, respiratory disease or heart disease, all of which could be prevented. In 1995 one in five of all deaths in the UK were caused by smoking. However, in spite of the knowledge that smoking cigarettes causes

death and illness, people continue to smoke in large numbers and 28% of adults are regular smokers (Health Trends, 1995). A high proportion of unskilled and manual workers smoke heavily (Table 5.4). The percentage of men who smoked cigarettes fell by 8% between 1982 and 1992 while the percentage of women who smoked cigarettes fell by 5%, at a slower pace, from 32 to 27 percent (Table 5.5).

More recent figures show that 27% of adults (28% men and 27% women) aged 16 and over smoked cigarettes in 1998 in England. The prevalence of cigarette smoking among adults has dropped substantially since 1978, although it levelled off in the 1990s (Department of Health, 1999). However, the prevalence of smoking is higher for people in manual than non-manual socio-economic groups (British Heart Foundation, 2000).

Table 5.5. Prevalence of smoking cigarettes among adults aged 16 and over, by sex, in England, 1982- 1992

						Percentages[1]
	1982	1984	1986	1988	1990	1992
Male smoker[2]	37	35	34	32	31	29
Never smoked[3]	32	34	33	35	37	39
Female smoker[2]	32	32	31	30	28	27
Never Smoked[3]	51	50	51	51	52	53

[1] Percentages rounded to nearest whole figure
[2] Information on smokers is based on respondents who stated that they smoked at all nowadays
[3] Prior to 1986, this category was "never or occasionally smoked cigarettes"
Source: OPCS General Household Survey Analysis of Department of Health (cited in HMSO, 1994 Ed)

A study of more than 10 000 UK myocardial infarction (MI) survivors has shown that non-fatal MI rates are five times greater among smokers than non-smokers (Parish *et al.*, 1995). The risks were greatest in the 30-49 age group, three times more common in smokers than non-smokers in the 50-59 age group, and twice as great at ages 60-79. An estimated 20% of deaths from CHD in men and 17% of women are due to smoking. About 28% of men and 26% of women in the UK are smokers. Smoking cessation is associated with a reduction in the risk of recurrent cardiovascular disease of up to 50% within one year (Daly *et al.*, 1983). Not only is smoking related to heart disease incidence, but also it is associated with neuroticism and anxiety (McCrae *et al.*, 1978). Hennigan and Wortham (1975) expressed the view that people who are not smokers and are in good physical condition are all able to maintain low heart rate during the normal stress of the working day, whereas stress is more likely to increase the heart rate of people with less physical fitness.

In a study on cigarette smokers and non-smokers Jones and Parrot (1997) found that smokers reported significantly higher stress levels than non-smokers on both day and night shifts. Previous studies in the UK also found that current smokers were more stressed than either non-smokers or former smokers (Cox *et al*., 1987; West, 1993). Robertson (1990) reported that heavy smokers reported higher levels of anxiety, neuroticism and depression than non-smokers.

It has been found that smoking is one of the most common ways of coping with stress among nurses (Hawkins *et al*., 1982). Between 1972 and 1980 the proportion of smokers in all groups fell, especially among professionals (Social Trends, 1983). Doctors were one of the first groups of individuals who gave up smoking once its harmful effects were known (Registrar General, 1978). In our sample of GPs 91.4% of doctors were non-smokers (Rout and Rout, 1993). In a recent study 78.6% hospital doctors and nurses in the North West of England were non-smokers (Rout and Rout, 2001). In our district nurse sample in the North West of England (Rout, 2000) a higher percentage of nurses were non-smokers (91.9%) compared to other studies (Hingley and Cooper, 1986; Dunn *et al*., 1994). It was found by Golding and Cornish (1987) that fewer medical students were smokers or illicit drug users than non-medical students. Doll and Peto (1976) demonstrated the beneficial effects achieved by doctors due to decreased smoking. The SMR for doctors from lung cancer was 35% of that expected for the general population (OPCS, 1978). Smoking can be seen as a form of palliative coping which provides temporary relief (Lazarus, 1981). Hence, giving up smoking could promote general health, but residual tension may remain, which in turn influences the behaviour in a negative way, e.g., excessive alcohol consumption and self-prescribing drugs (Lloyd, 1982; Bennett, 1982; Murray, 1978, 1983).

7. ABSENTEEISM

Absenteeism is an accelerating problem for many industries and an obvious cost of stress to employers. It has been reported by Kearns (1986) that 60% of absences from work are caused by work-related disorders and in the UK 100 million working days are lost each year due to absenteeism. Hingley and Cooper (1986) report that short-term absences among nurses are believed to result from occupational stress. Doctors and nurses are more likely to take time off because of stress than the common cold (Neurolink, 2001). The NHS is significantly affected financially by occupational stress. It was demonstrated by the Nuffield Trust Study that cutting sickness rates

by just one per cent could make a saving of over £140m (Williams *et al*., 1998).

Several factors may contribute to absenteeism, such as family commitments, illness, or voluntary withdrawal. Studies have shown that poor health, particularly poor psychological well-being, is a major cause of absenteeism (Miner and Brewer, 1976). Porter and Steers (1973) have reported that job dissatisfaction is a major factor in blue-collar absenteeism from work, intention to leave, and labour turnover. It has been suggested that dissatisfaction with pay, inconsiderate leadership, failed expectations, lack of autonomy and poor support from co-workers are factors associated with high rates of absenteeism or labour turnover. A case study is given in box 5.1 to show how absenteeism can cause serious problems for the organisation.

Box 5.1

Dr Y was a full-time partner in a group practice of five doctors. She expressed that she did not get any support from her colleagues during her illness. The senior partner was always unsympathetic towards her. She felt insecure in her job. She told us that her pay was far lower than the other partners. Ten years ago she developed a disc problem and since then she has reduced her commitment. Accordingly her share was reduced to 60%. Gradually, over the years her workload has increased, but her pay remained the same. She has repeatedly raised this issue in the practice meeting, but the outcome has never been favourable to her. Her expectations of a pay rise have been dashed again and again. She gets upset and stays off sick several times in a year claiming that she has problems. Her partners took on extra workload and had to reschedule their routine. These episodes were not only stressful for the doctors but also stressful for the practice manager as she had to arrange locums at short notice. Patients were unhappy to find that their appointments were cancelled or that they had to see another doctor.

Although Dr Y continued to remain absent from work frequently, she did not wish to leave the practice. Her partners also were not very keen to dissolve the partnership, as it would involve spending time and money. If Dr Y was to be replaced, it would mean extra work, time and expenditure, such as advertising for a partner, short-listing candidates, interviewing, etc. It may be necessary to invite an outsider (a psychologist) to sit at the interview panel to assess the suitability of the interviewees. Besides costing time and money the changes disrupt routine work and may lower group morale.

8. BURNOUT

Burnout is a negatively valued psychological response that is characterised by physical, mental and emotional exhaustion. It is an 'erosion of the human spirit' which results from prolonged exposure to high levels of occupational stress (Baron, 1986). Veniga and Spradley (1981) defined burnout as 'a debilitating psychological condition brought about by unrelieved work stress, which results in: 1) depleted energy reserves, 2) lowered resistance to illness, 3) increased dissatisfaction and pessimism, and 4) increased absenteeism and inefficiency at work'.

According to Veniga and Spradley (1981) burnout progresses through five stages:

1. Stage of job contentment, where the person is content with his/her job, but he/she works harder and expends more and more energy without replacing it.
2. Stage of fuel shortage, where the individual starts to feel tired due to lack of energy, and has disturbed sleep. He/she is unable to do as many activities as he/she used to do. He/she shows a tendency to avoid making decisions and lacks enthusiasm.
3. Stage of chronic symptoms, where the individual feels exhausted. He/she shows symptoms of physical illness, such as tension headaches, backaches, and nausea, and may wake up early in the morning feeling tired. He/she shows signs of anger and loses temper without reason.
4. Stage of crisis, where symptoms become critical. His/her mind is always pre-occupied with work problems. Sometimes, he/she feels like escaping from the job and from the life.
5. Stage of final breakdown, where the individual shows signs of serious deterioration, indulges him/herself with heavy drinking and/or drugs, or the symptoms may show in physical or mental breakdown. At this stage the individual shows serious deterioration.

Burnout professionals work harder and harder, but accomplish less and less. When symptoms of stress appear one must act immediately before stress turns into burnout. The primary cause of burnout is continuous face-to-face interactions with individuals (Edelwich and Brodsky, 1980; Jones, 1987). Burnout occurs among caring professions such as human service workers and medical professionals (Maslach, 1976, 1982). Medical professionals caring for ill or dying children are particularly vulnerable to burnout (Clarke *et al.*, 1984). In a UK study it was found that GPs in Northamptonshire have suffered from a higher level of burnout on all three sub-scales of the Maslach burnout inventory than North American physicians and nurses (Maslach's results derived from a study during the mid 1980s) (Kirwan and Armstrong, 1995). Molassiotis *et al.* (1995)

surveyed 129 nurses and 29 doctors in bone-marrow transplant units. Half of the sample was emotionally exhausted and 80% reported feelings of low personal accomplishments. The majority of these professionals had experienced difficulties in their personal lives which were directly linked to stress at work.

The Maslach Burnout Inventory was used to study burnout among health professionals (Maslach and Jackson, 1982). Three psychological components of burnout are assessed by this instrument: emotional exhaustion, depersonalisation and perceived inadequacy of professional accomplishment.

- Emotional exhaustion: the feeling of being unable to help people.
- Depersonalisation: lack of sensitivity, treating people like objects.
- Perceived inadequacy of professional accomplishment: feeling of falling short of personal expectations for performance at work.

Our interviews with several primary care professionals during 1993 and 1994 revealed several cases of burnout. Some of the examples of burnout cases are as given below (see boxes 5.2, 5.3, 5.4, 5.5, 5.6 and 5.7).

Male general practitioner

Box 5.2

Dr L was a general practitioner. His life's ambition was to build his career in hospital medicine, hoping to become a consultant physician. He worked hard and passed his membership examination. Once he realised that his chances of becoming a consultant were rather remote he decided to get into general practice. Dr L found that the set-up and the type of work carried out in general practice were totally different to what he had expected. He appeared to have lost interest in everything, cancelled his surgeries without giving prior notice, became irritable with patients and surgery staff. His wife complained that Dr L showed a detached attitude towards her and the children. He did not sleep well and started getting up in the early hours of the morning. He was not prepared to discuss his problems with his wife or friends. Dr L was previously a non-smoker but liked an occasional drink. Recently he started drinking heavily and became a chain smoker. His partners were worried about him and offered to discuss any help that he needed, but he did not want any help from them. A few months later he suffered a nervous breakdown and resigned from his job.

Female general practitioner

Box 5.3

Dr A was working in a group practice in the North West of England. She joined a group practice of three doctors and was initially happy for a year until the circumstances appeared to be different than she had initially perceived. Her senior partners started to push more and more work towards her. She tried her best to cope with the workload but began to feel tired. She was unable to relax and felt undervalued. Her appetite became poor and she lost weight. Her patients commented about her weight loss and withdrawn appearance, which made her feel even worse. She felt depressed and had to stay off work for several months. After seeing her GP she was admitted to hospital with severe depression. After a while she recovered from her illness but decided not to go back to work. She is now at home. She told us that her parents were disappointed because they felt that so many years of medical training has been wasted. However, they were happy to see that she had recovered from the depression.

Female general practitioner

Box 5.4

Dr P, a mother of two children was a full-time GP in a group practice of five doctors in an urban area. Her husband was also a general practitioner in another practice. She was very ambitious and hard working. She had to look after the house and the children as her husband never helped her. She coped well for two years until the 1990 GP contract came into effect. Her workload increased significantly, she had to bring paperwork home, and she experienced increased out of hours demand from patients. She found it difficult to cope with these demands. She experienced headache, palpitation, lack of concentration, low self esteem, lost weight and felt depressed. She lost interest seeing patients, became unsympathetic and treated them like objects. Her colleagues were aware of her condition but were indifferent towards her. It became unbearable for her to continue and ultimately she left her job.

Female general practitioner

Box 5.5

Dr S was a full-time partner in a group practice of three doctors. She was sincere and hard working. Both of her partners exploited her and made her work hard. She carried on working but at a price to her own physical and psychological health and to her marriage. While going through a difficult period in her practice, her marriage ended in divorce which added to her stress. Her two grown-up children decided to live with their father making her feel lonely and abandoned. She was unable to work effectively in the practice. Her partners dissolved the partnership and as a result she had to leave the practice. She started a single handed practice in the same area. There were several hurdles before she could set up her practice. Although she was without the hassles of her previous partners she experienced difficulty in working on her own. After two years of starting her own practice she resigned from general practice and has remained unemployed.

District nurse

Box 5.6

Sister M has been a district nurse for 20 years. She was very popular amongst the patients and doctors alike. Although she had enjoyed her work all these years, her perception of district nursing changed after the recent changes in her local district nursing service. She found that the patients had become very demanding and did not realise that nurses were under restriction for supplying free items (commodes, incontinence pads and pants etc.). Besides, her manager wanted her to produce details of her daily activities and report on each and every patient seen. She expressed that these administrative activities were time consuming and of no benefit to patient care. She lost interest in her job, became irritable, and finally resigned from her job.

Practice manager

Box 5.7

Mrs H was a practice manager in a group practice of five doctors in an urban area. She had appropriate training and qualification for her job. She was managing the practice quite well until the NHS changes brought in during the 1990s. Although she knew that her job was mainly administrative, the new changes created more and more paperwork. She put more and more hours into her job. The doctors in the practice were not very sympathetic to her increased workload, rather they continued delegating more and more administrative work. She could not cope any more. She showed signs of irritation towards the ancillary staff and to the doctors as well. She started grumbling about not getting any job satisfaction, she was unable to socialise with others and appeared withdrawn. On several occasions she stayed off sick leaving the responsibility of running the practice with the senior receptionist. However, she carried on working but was unable to take decisions and found it difficult to manage the staff. She lost her appetite, lost weight and became depressed. She took early retirement on grounds of ill health.

In this chapter, we have considered the costs and consequences of stress in terms of physiological, psychological and behavioural outcomes. However, it is difficult to determine the cause and effect relationships between stress and ill health, but in summary, we could say that stress does play a role in ill health measure, which is expensive to the person, organisation and ultimately to society as a whole.

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Chapter 6

POTENTIAL SOURCES OF STRESS AMONGST PRIMARY HEALTH CARE PROFESSIONALS

In this chapter we are able to focus only on a few members of the primary care professionals. This does not imply that other occupational categories are less important but due to the lack of space we decided to include only the following professionals: general practitioners, practice managers, practice nurses, receptionists, district nurses, health visitors and community psychiatric nurses. Although other studies from the literature will be cited we will be focusing mainly on our own studies.

1. GENERAL PRACTITIONERS

There have been a number of studies on stress and the health among GPs (Porter *et al*., 1985; Makin, Rout and Cooper, 1988; Rout and Rout, 1993, 1994, 2000; Chambers, 1992; Chambers and Belcher, 1993). Constant time pressure, heavy workload, problems of practice administration, home/work conflict, demands on the job, patients' expectation and emergencies are among some of the stressors for GPs (Porter *et al*., 1985; Howie *et al*. 1989; Rout and Rout, 1993, 1994, 2000; Rout *et al*., 1996). Schatter (1998) conducted a study among a sample of 464 metropolitan GPs and found that over 10% reported occupational stress.

In a sample of Australian GPs, it was found that 'physical overwork' was the main stress that was caused through medical practice (Bates, 1982). In a study of GPs' job satisfaction and quality of prescribing, Melville (1980) found low job satisfaction to be associated with higher levels of prescribing of certain drugs. She suggests that job dissatisfaction appeared to be correlated with frustration and gave two reasons for this. According to her, the personality characteristics of some GPs might not match the requirement of general practice work. Secondly, certain aspects of the GP's task could

lead to dissatisfaction. Mechanic (1972) found that time factors were major sources of dissatisfaction for physicians in the primary care setting. Grol and colleagues found that negative feelings about work (i.e. frustration, time pressure, tension) correlated with a high rate of prescribing and reluctance to provide an explanation to patients. Positive feelings about work (i.e. satisfaction, feeling at ease) were correlated with a more open approach to patients and more attention to the psycho-social aspects of the complaints (Grol *et al*., 1985). Recently, GPs' job satisfaction and psychological health were compared with medical house officers in Leeds (Kapur *et al*., 1999). It was found that GPs were less satisfied with their hours of work and the recognition they received for their good work, but more satisfied with their job variety and job autonomy. The authors suggest that the burden imposed on GPs by the 1990 contract and the reduction in junior doctors' hours of work and more structured hospital training are possible explanations.

A study on doctors and health service managers revealed that GPs are more likely to be depressed and show suicidal thinking than senior health service managers and hospital consultants (Caplan, 1994). Other authors have found that GPs reported depression and anxiety frequently as problem areas (Chambers and Belcher, 1993). After the introduction of the 1990 GP contract, Sutherland and Cooper (1992) found a fall in job satisfaction and an increase in anxiety and depression among GPs in 1990 when compared to 1987 (data from Rout, 1989). Even before the introduction of the 1990 contract, it was found that the work of GPs makes them particularly prone to anxiety (Rout, 1989).

Research into the attitudes and behaviour of GPs, has shown that they have difficulty in disclosing psychological or physical problems (Richards, 1989). Several studies have shown that self-medication is widely practised by GPs (Allibone *et al*., 1981; Richards, 1989). The commonly believed myth that doctors are indispensable and should carry on working even when they are ill (Richards, 1989) may be the reason for this widespread self-medication. Self-medication with antidepressants and tranquillisers may be detrimental to the health of doctors. The mortality and morbidity data on GPs are well documented from previous research and suggest that they may indeed be at considerable risk of illness and other stress related problems (Murray, 1976; HMSO, 1975; Rout and Rout, 1993).

A study by Porter *et al*. (1985) gives in depth information about the time allocation for different activities of GPs. The aim of their study was to analyse the relationship between workload, stress, job performance and quality of care in general practice. Eighteen doctors were studied over 3 days in three group practices in Edinburgh. They used interview, diary and questionnaire methodologies to find out workload, work-flow, self-perceived pressure and stress, and stressor-mediating factors (such as personality, biography, attitudes/orientation, and social support). Direct patient care accounted for 83% of the allocated time (about 28 hours per week) and

practice-related work accounted for a further two hours per week. Activities outside the practice accounted for 2.5 hours per week. The average consultation rate during 66 surgery sessions was 7 patients per hour (range was 3.8 to 11.5 patients per hour). The average stress score was 4.7 and there was a wide range of values of 'stress' per doctor (3 doctors had an average score of 0 and one doctor had an average score of 10, maximum = 14). The practice with the slowest consultation rate recorded the lowest proportion of pressure scores and the practice with the fastest consultation rate recorded the highest proportion of pressure scores. The findings show that there is a high degree of individual variability in experiencing stress and the rate of consultation is proportional to the pressure score. The authors suggest that it is important to understand the behavioural changes that might occur when the GP is challenged by stress and the subsequent consequences on patient care.

The following discussion presents the findings of some of our recent studies. The aims of the studies were as follows:

- Identifying sources of stress among GPs
- Assessing the mental health and job satisfaction of GPs
- Identifying the relationship between the stressor agents and outcomes
- Highlighting the differences as a function of gender.

First, a brief outcome of study 1 and study 3 will be described together, as both are qualitative studies. Then our quantitative studies will be described.

1.1 Qualitative Studies on GPs (Study 1 and Study 3)

Our studies on stress among GPs in the UK have been going on since 1987 (Rout, 1989; Rout and Rout, 1993). The interview sample described here is part of the most recent series of studies and relates to 74 GPs including both male and female, who participated in the interview studies that we conducted. The sample of GPs was selected from a variety of practices, for example solo v group, urban v rural and social mixed areas. Confidentiality and anonymity of participants were assured. In-depth interviews were carried out with GPs, their spouses and their children. The detailed analysis of the spouses and children's interviews is reported in our previous book (Rout and Rout, 2000). The interviews were aimed at exploring personal and professional aspects of general practice, especially stress related to the job and possible overflow of stress into their family life. The interviews were recorded on audio tape and took between 35 minutes and one hour. A qualitative approach was adopted since the aim was to gain an understanding of how GPs perceived and experienced stress. The age range of GPs varied from 32 to 60 years. The tapes were transcribed and thematic analysis was performed.

Responses to questions about sources of stress were analysed to identify recurrent themes concerning sources of stress at work and at home. For convenience, the stressors concerning male and female GPs will be discussed separately. However the detailed analysis of the interview sample can be found in our previous books (Rout and Rout, 1993, 2000).

1.1.1 Male General Practitioners' Stress

When the GPs were asked to what extent they found their job stressful, 100% indicated that they experienced moderate to high stress at work. The stressors included the following:

- time pressure/work overload
- on-call
- interruptions
- increased demands by patients
- unrealistically high expectations
- communication

Time Pressure/Work Overload

Time pressure was the most frequently reported stressor for GPs. The doctors often complained about shortage of time for managing too many tasks in a limited period. One GP explained:

> 'My surgeries are getting longer and longer day by day because quite a large number of patients want to be seen straight away and these patients come with minor ailments which could wait for some days. I have provision for seeing extras . . . so called emergencies after the end of my booked appointment session. Some people take advantage of this. They don't bother making appointments, they just turn up at the reception and demand to be seen immediately. I don't mind seeing genuine cases but if you look into their medical records you will notice that it is the same group of people who repeatedly come as emergencies for every little thing, like repeat prescriptions, sick notes and things like that. I carry on seeing patients, and get late for home visits. There isn't enough time for lunch so I have a bite of a sandwich in my car in between home visits. I don't catch up with paperwork and other routine jobs. Basically everything gets thrown out of schedule'.

On-call

Another potential source of stress for male GPs was the pressure of on-call. GPs have a contractual obligation to provide 24 hour cover for their

patients. Some GPs use deputising services if available in their areas while others do their own out-of-hours cover. They have to remain on-call during the day and night. In recent years there has been a significant growth of GP co-operatives in various parts of the country enabling GPs to provide out-of-hours cover for their patients through these co-ops. It may be a cost effective way for out-of-hours cover but usually participating GPs are required to work for their co-ops. This is illustrated by the following quotation:

> 'Life is a bit easier since we started our co-op services in our area. It takes the load off your shoulders after 7 pm until 7 am the next morning. There is no co-op cover after 7 am in the morning. If a patient rings for a visit I shall have to visit. It is a bit difficult in the morning especially while you are trying to get ready to go to the surgery. Even when I don't get a call I have this apprehension that the telephone might ring. You can't really switch off. Anyway, as a co-op member I have to work for the organisation as well, at least one six hour session a week and this can be really stressful at times'.

Interruptions

Comments made by GPs during interviews suggest that interruptions of any kind are considered as very stressful. Interruption during consultation is not only irritating to the doctor but also distressing to the patient. One of the GPs exemplified this by stating:

> 'I hate interruption during consultation. I have given strict instructions to my staff not to ring through to me while there is a patient with me but that doesn't make any difference. You can take it for granted that the phone will ring and the receptionist will always have an excuse. Staff have been instructed to take the caller's telephone number so that I could return their call later but there will be one or two receptionists who tend to panic when they receive calls from problem cases. I know I need to reinforce my strict instruction not to interrupt me again during consultation but it does not always work.'

Increased Demands by Patients

From the interview sample it was learnt that the GPs felt pressurised in meeting the increasing demands made by patients. A male GP who has been practising for 20 years complained:

> 'I never saw patients demanding so much ten years ago. I think they are encouraged by the politicians to demand for everything they want.

> They want immediate appointments to see their GP, demand home visits for people who are quite capable of attending the surgery and they even threaten litigation if their demands are not met. They wish to see specialists at short notice and have no patience to wait for operations. I think they should complain to their local MP about the services not meeting their demands'.

Unrealistically High Expectations

Many GPs felt that the expectations and needs of the public have risen to such a high level that they find it difficult in meeting these needs. This theme follows on from the previous one:

> 'Patients' expectations have never been so high before. My patients just want an excellent and express service. They are quite right to expect quality service but where does it come from? We don't hold the key to everything; we need resources to meet their demands. Some patients don't understand that there is a waiting time to see a consultant, they don't realise that there are restrictions on prescribing certain drugs like Viagra. I do my best to meet their clinical needs but can't make other agencies meet everyone's expectations'.

Communication

The authors found from their interview sample that GPs are poor communicators and they lack interpersonal skills. The senior partner/s assume that the junior partner/s would perform the job the way he/she has conducted it in the past. There were also problems of communication among GPs and practice staff. A junior partner in a group practice commented:

> 'General practice is a team work and therefore there is a need to keep the communication network open to all the members in the organisation. We could all be doing the same thing but in different ways. We had a problem in our practice with entering data into the computer. One of us was entering blood pressure as hypertension, another partner as essential hypertension and the practice nurse was entering as blood pressure screening. It caused problems while carrying out audits, as all the data was not entered into the appropriate section. We could have avoided this problem by proper communication to all individuals concerned. We have the same problem with receptionists because sometimes they were not informed about the policies that we doctors and the practice manger had agreed in the practice meeting. Sometimes one of my partners wants to see extras at the end of his booked surgery and the other partner wants to see extras in between his booked patents. The receptionists were not

informed about this by the practice manager so they asked patients to come at any time. All the doctors were unhappy about it. We develop different protocols and take decisions on a lot of things but often they are not passed on to our staff. No wonder the staff do their job differently than what we decide in practice meetings. My senior partners still don't understand that communication is essential for the implementation of the practice policies. They carry on doing the same old thing'.

1.1.2 Female General Practitioners' Stress

The proportion of female general practitioners in England and Wales was 18.0% in 1981 and 28.6% in 1993 (Wilson and Allen, 1994) which shows a clear rising trend of female GPs entering into general practice. Recent figures show that during 1996, 30% of GPs in England were female (Pullinger, Dept of Health, 1998). Now, female medical students average just over 50% of the UK's annual intake to medical schools (Wilson and Allen, 1994). Despite working full-time women are often expected to meet domestic commitments. There is some evidence that conflicting demands from work and family can be stressful (Lewis and Cooper, 1988). Heins *et al*. (1977) found that female doctors spend 90% as much time in medical practice as male doctors while tending to assume direct responsibility for home and family, therefore, they have the added burden of trying to balance the demands imposed by both sides. It was found that women are more likely than men to enter a speciality, which is not their first choice (Parkhouse and Ellin, 1988) and many more women than men fail to achieve their desired status in general practice (Buchan and Stock, 1990).

In a recent study in Canada, Stewart *et al*. (2000) found that multiple roles (competing demands at home and work), high expectations (they had to outperform male colleagues) and working environment (inflexibility of work and on-call schedules, inadequate work supports, inequalities in promotion and reimbursement, and harassment) were major stressors for female physicians. In our previous studies it was found that female general practitioners felt that it was difficult to balance their traditional and professional roles at the same time (Rout, 1989; Rout and Rout, 1993).

Research evidence suggests that stress and pressure may be different for male and female doctors (Cartwright, 1987). Findings from other studies suggest that costs of stress and strain might extend into the private life of doctors (Cartwight, 1967; Cartwright and Anderson, 1981) which may be more prevalent for women doctors as they take more responsibilities at home. Although the divorce rate for male doctors is lower than other professional groups, it is higher among female doctors (Rosow and Rose, 1972). Therefore it is important to consider gender differences in stress research among doctors. We extracted several additional stressors for the female GPs from the interview transcripts [Full descriptions of the results can be found in

our previous book (Rout and Rout, 2000)]. The important stressors for female GPs are as follows:

- emotional involvement
- role conflict
- work-home conflict
- lack of support

Emotional Involvement

Some women GPs find it difficult to distance themselves from patients. They particularly find it hard to break bad news to the patients and their relatives. As a female GP illustrated:

> 'For me it is extremely difficult to break bad news to a patient who has an incurable disease. Sometimes the relatives pressurise me not to tell the patient about the real diagnosis which puts me into a moral dilemma. Once I had to break the news to a 17 year old school girl that she had a brain tumour. The whole family was devastated with the news. I felt awful in managing this case'.

Role Conflict

Female doctors are more susceptible to role stress due to the multiple role demands inherent in running a career, home and family. The stress is a product of conflict between the role of a woman and role of a doctor. Carrying out the traditional role of a mother and a spouse and a professional role in a satisfying way requires time and energy. Time demands impose a tighter schedule on the personal lives of women doctors than men, the women being less able to relax. One young female doctor who had joined a practice recently was a typical example:

> 'My partners in the surgery do not understand my role as a GP and a mother. I was not clear about the holidays and other arrangements although they told me I could take time off during school holidays. But when my daughter was ill I was not allowed to take time off.'

Work/Home Conflict

This theme is similar to the previous one. Conflicting demands from work and home can be very stressful for some doctors. As one of our female GPs indicated:

> 'At the end of the day I have to look after two children. When I am on-call this becomes very hard in dealing with the patients on the phone

and interacting with my children. I have no time to put my feet up and watch a nice programme on the telly. There is no help from my husband.'

Lack of Support

On the whole, the women GPs we have spoken to believed that their husbands were not understanding about their work commitments. This is illustrated by a female GP:

'My husband expects me to do everything at home. We both are doctors. He is able to become a consultant because I sacrificed my career for raising the children. Now he should understand and share some housework and responsibility but he does not'.

Interestingly, male GPs were affected more by the work related aspects of the job (on call, interruptions, demands by patients), whereas female GPs were affected more by the job interfering with their family life (conflict between career and family and lack emotional support).

1.2 Quantitative Studies

A national sample of GPs was studied (Rout, 1989; Rout and Rout, 1993) to identify sources of job stress associated with high levels of job dissatisfaction and mental ill-health. After interviewing GPs we constructed a questionnaire and distributed those to a sample of GPs for our pilot study (Rout, 1989; Makin, Rout and Cooper, 1987). This questionnaire, along with other valid measures, were sent to a random sample of 4000 GPs throughout England. The return questionnaire sample was 1817, of which 1474 were male and 343 were female. Of these, 91% were in group practices.

The demographic picture was typical of the general practice occupational group nationally, except that slightly fewer doctors aged 65 or over responded. In terms of health behaviour outcomes, 91% of GPs did not smoke; 32.5% had an occasional drink, 36.7% had several drinks a week, 18.6% had one or two drinks every day, and nearly 6% had 3 to 6 drinks or more daily. Male GPs consumed significantly more alcohol than the female respondents. The stressor items (38 items) were analysed to identify common stressor themes. These items were grouped statistically into six factors: demands of the job and patients' expectations, interruption, practice administration, work/home interface and social life, dealing with death and dying, and medical responsibilities for friends and relatives (see Table 6.1).

Table 6.1. Job stressors identified by GPs: Factor analysis of stressors

Factor 1: Demands of the job and patients expectations (62.8% of variance)
Fear of assault during night visits
Visiting in extremely adverse weather conditions
Adverse publicity by media
Increased demands by patients and relatives for second opinion from hospital specialists
No appreciation of your work by patients
Worrying about patients' complaints
Finding a locum
Twenty-four hour responsibility for patients' lives
Taking several samples in a short time
Unrealistically high expectations by others of your role
Factor 2: Interruptions (10.6% of variance)
Coping with phone calls during night and early morning
Night calls
Interruption of family life by telephone
Emergency calls during surgery hours
Home visits
Dealing with problem patients
Remaining alert when on call
Factor 3: Practice administration and routine medical (8.6% of variance)
Hospital referrals and paperwork
Conducting surgery
Practice administration
Arranging admission
Working environment (surgery set-up)
Time pressure
Factor 4: Home-work, interface and social life (7.7% of variance)
Demands of your job on family life
Dividing rime between spouse and patients
Demands of your job on social life
Lack of emotional support at home, especially from spouse
Factor 5: Dealing with death and dying (5.5% of variance)
Daily contact with dying and chronically ill patients
Dealing with terminally ill and their relatives
Factor 6: Medical responsibility for friends and relatives (4.4% of variance)
Dealing with friends as patients
Dealing with relatives as patients

The model of stress in GPs illustrates the sources of occupational stress and subsequent stress outcomes, based on our findings (see Figure 6.1).

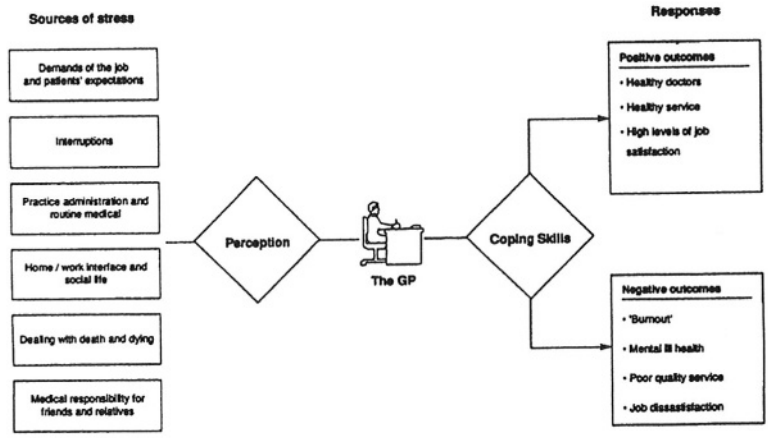

Figure 6.1. The six broad sources of stress identified in our study showing how the outcome is a direct response of a GP's perception of the sources of stress and his skill in coping with them.

The study showed that female GPs were significantly more satisfied with their job than their male counterparts. Male GPs had significantly higher levels of anxiety than the normative comparison group. On the other hand female GPs had significantly lower scores on the anxiety, depression and somatic anxiety scales. Multivariate analysis showed that the stressors associated with the demands of the job, practice administration, interruption and home/work interface were predictive of job dissatisfaction. Predictors of overall mental ill-health included the stressors of practice administration, interruptions, demands of the job and patients expectations and home/work interface. It was concluded that the sources of stress identified as significant predictors of both lack of mental well-being and job dissatisfaction were related to managerial and social skills rather than technical skills and abilities. These skills can be developed by training.

In the second quantitative study our objective was to compare the measures of job satisfaction, mental health and job stress amongst GPs, by surveys before the new contract came into effect, and again 3 years later (Rout and Rout, 1994). We distributed 850 questionnaires in 1993 to a national sample of general practitioners. A total of 414 questionnaires were returned of which 380 were sufficiently complete for statistical analysis. The sample consisted of 68.9% male and 30.8% female GPs. Their ages ranged from 25 to 65. The sample in 1987 study was 1817 GPs (see previous study for details).

It was found that GPs were more stressed in 1993 than in 1987. Both male and female GPs appeared to be more depressed and had higher levels of somatic anxiety in 1993 than 1987. GPs were less satisfied with their job in

1993 than in 1987 (see Table 6.2). This may be due to the great number of changes that have taken place during this intervening period. They had to work in an uncertain environment during these years. They have been compelled to fulfil the requirements of the new changes in their job. Karasek's (1979) job strain model predicts that job strain results from the combination of low job decision latitudes (constraints in decision making or less control over the task) and heavy job demands. This same combination is associated with job dissatisfaction. As mentioned earlier, the high demand nature of general practice is well documented. The accelerated changes in general practice in 1990 was beyond the control of the doctors due to lack of consultation with ordinary members of the profession (Bain, 1991). This has resulted in considerable tension among GPs. We suggest that there was a perceived loss of control among GPs. The findings highlight the importance for GPs to have control over their work environment, status in their job and recognition from others for work well done. These findings have important consequences for what can be done about GP stress. This is discussed in chapter 8.

Table 6.2. Mean scores on job satisfaction (high score = high satisfaction), mental health (high score = poor mental health), drinking behaviour and type A behaviour by sex of respondents (comparison between 1987 and 1993 data)

	GPs 1993			GPs 1987			
	n	mean	sd	n	mean	sd	t
Job satisfaction							
Males	262	44.14	10.35	1433	50.30	8.23	9.20***
Females	116	44.97	7.98	335	52.80	7.36	9.27***
Mental health							
Males	260	10.10	7.87	1401	8.96	6.68	2.20*
Females	117	12.79	7.27	316	10.80	6.51	2.60**
Free-floating anxiety							
Males	260	3.93	3.49	1439	3.70	3.17	1.07
Females	117	5.45	3.53	335	4.84	3.35	1.67
Somatic anxiety							
Males	260	2.71	2.60	1426	2.36	2.18	2.29*
Females	117	3.14	2.33	331	2.65	2.24	2.01*
Depression							
Males	260	3.46	2.91	1431	2.92	2.65	2.89**
Females	117	4.20	2.85	335	3.37	2.40	3.07**
Drinking behaviour							
Males	262	2.84	1.01	1467	1.89	1.02	14.00***
Females	117	2.70	0.84	343	1.70	0.91	10.86***
Type A behaviour							
Males	261	94.55	17.73	1450	93.09	19.70	1.29
Females	117	96.65	14.66	338	92.39	15.79	2.66**

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

The next study (Sibbald, Enzer, Cooper, Rout and Sutherland, 2000) compared GP job satisfaction from 1987 to 1998, covering a period of major changes in the organisation of British general practice. Postal surveys of national samples of GPs were carried out in 1987, 1990 and 1998. The questionnaire contained a list of job stressors and a job satisfaction scale. The three samples were 1817 GPs in 1987, 917 GPs in 1990 and 1828 GPs in 1998. From 1987 to 1990 stress increased for 8 of the 14 stressors. Of these three subsequently declined in 1998 (interruptions by emergency calls, night visits and home/family life disturbance) and three continued to increase (unrealistically high expectations of role by others, working environment and adverse publicity by the media). In sum, the results suggest that job satisfaction among GPs has declined from 1987 to 1990 followed by partial recovery from 1990 to 1998. However, most aspects of job satisfaction have yet to return to 1987 levels.

The downward trend in satisfaction from 1987 to 1990 and 1990 to 1998 in relation to freedom to choose one's own method of working and amount of responsibility given, suggest that managerial control is not an important determinant of GP satisfaction. It has been suggested that for doctors, clinical autonomy is a more important determinant of job satisfaction than managerial autonomy (Lichenstein, 1998). As mentioned earlier, the introduction of the 1990 GP contract gave GPs control with enhanced accountability. This may have eroded their clinical autonomy.

A recent study **(n=205)** was conducted in the North West to find out the differences between male (63.4%) and female GPs (36.59%) on their job satisfaction, stress and mental health (Rout, 1999). Although there was no significant difference between male and female GPs on the job satisfaction scale both genders were unhappy about their rate of pay, hours of work and amount of work they do. Multivariate analysis disclosed three job stressors (time pressure/interruptions, working environment/communication, career and goal achievement) that were predictive of high levels of job dissatisfaction for both male and female GPs. The mental health scores from the present study were compared with those of the 1993 study (Rout and Rout, 1993) and the normative population. Male GPs had significantly higher scores on the free-floating anxiety, somatic anxiety and depression scales in 1997 than in 1993. Female GPs had higher scores on the somatic anxiety scale in 1997 than in 1993. Male GPs exhibited higher levels of free-floating anxiety and depression and lower levels of somatic anxiety than the normative population. Scores for female GPs on somatic anxiety and depression were lower than the norm. This remarkable mental well-being may reflect the fact that women GPs are more likely to work part-time than their colleagues and/or they adopt better coping strategies. The results of this study are consistent with Brown's (1992) study which found that Canadian women doctors had lower depression scores than other populations. Another comparative study on working and non-working mothers found that working

women were less depressed than non-working mothers (Rout *et al*., 1997) which shows the effects of employment on women's mental health are positive.

2. PRACTICE MANAGERS

The second occupational category considered in this chapter is the practice manager. While stress amongst GPs has been the most extensively studied in primary care, little is known about stress experienced by practice managers. There has been very little research conducted on practice managers' stress. One study on managing change found that practice managers usually felt no access to financial information and involvement in important decisions in practices (Pringle, 1992). Instead, they are informed of the outcome of a planning meeting and expected to show enthusiasm and commitment to implementing the plan. Following the 1990 changes in the NHS, practice managers are having to work under pressure in order to achieve patients' satisfaction, maintain staff morale and accomplish the objectives of the practices. During 1994 we conducted a study to identify sources of stress among practice managers in the North West of England and to highlight their coping strategies (Rout, 1996). A qualitative approach was adopted since the aim was to gain an understanding of how practice managers perceived and experienced stress, particularly in an exploratory study. In-depth interviews were carried out with 26 practice managers out of which 25 were female and one male, 23 were working in group practices and 3 were in solo practices. Their age range varied from 32 to 54 years and their experience ranged from 4 to 11 years. The interviews were tape recorded and took between 45 to 90 minutes. The tapes were transcribed and a thematic analysis was carried out.

Responses to questions about sources of occupational stress and coping strategies were analysed to identify recurrent themes concerning sources of stress at work and at home. All the practice managers in this sample considered dealing with a variety of new forms to be a high pressure activity. Other stressors identified were time pressure/NHS change (due to time spent to study the new changes), staff problems, dealing with problem patients, practice organisation, pressure from the GPs, staff and patients, communication difficulty, practice organisation, and lack of delegation. An example of a practice manager's experience of pressure can be seen in box 6.1.

Box 6.1

Mrs Z was newly married when she took up the post of practice manager in a single handed practice in 1989. She was managing the practice quite well until the 1990 GP contract was introduced. She had to struggle to understand the new principles in the new contract. The doctor in the practice delegated more and more administrative work to her. She took on more and more responsibility and had to take paperwork home on many occasions. Her marital life became strained. She became stressed and had difficulty in conceiving. She was trying for a baby during the time of her interview. She complained of heavy workload in the surgery: "doctors are putting on more and more pressure, I have no time to rest for a few minutes". She was having to fill up different claim forms otherwise doctors would lose money. Her husband was unsupportive, blamed her for working too hard for the practice and not being able to relax. However, eventually she became pregnant but unfortunately she lost the baby. Her stress level was on the rise. She felt that she would be happier by leaving her job. Eventually she left the job.

Figure 6.2 illustrates the sources of stress among practice managers.

Figure 6.2. Sources of stress in practice managers

The following are some of the stressors that we extracted from the interviews.

NHS Change/Time Pressure

With the rapid change in the NHS, the practice managers have been experiencing additional pressure and finding it arduous to manage. For example, as one practice manager commented:

'I know my job involves administration but there have been so many changes in recent years it has taken more time for me to learn the changes than actually do the job. I feel that goal posts are being moved too frequently to suit the NHS managers. I can't see this mounting paperwork is of any benefit to patient care. The doctors are under pressure of workload and they are passing on more work to us'.

Another practice manager said:

'It is very difficult to keep up with the changes'.

Problem Patients

The practice managers in the interview sample were concerned about difficult and demanding patients; some even showed their distress about violent patients. As a practice manager expressed:

'Sometimes it is difficult to control the situation when there is a problem patient. They are abusive and at times very aggressive'.

Communication/Practice Organisation

A common theme running through the interviews was communication difficulty within the practice. These practice managers expressed that the doctors take decisions without the knowledge of the practice manager and in other circumstances a clear-cut practice policy is ignored by some doctors when it comes to implementation. As a practice manager remarked:

> 'There is a practice policy but it does not work. It is demoralising. For example, it is agreed that when more than one doctor is on holiday the others should give up their half days. When I ask the doctors to chip in they always come up with an excuse to avoid work. I feel as though I am talking to a brick wall'.

Delegation

There was a feeling amongst the practice managers that they were not trusted by the doctors and they were not delegated important jobs. Often practice managers feel frustrated, angry and undervalued by the doctors. As a practice manager commented:

> 'Doctors think that they would lose their authority if they delegate certain things. Sometimes they don't trust me. I feel angry and frustrated when doctors, without considering me pass messages on to the cleaner'.

Our study confirms the study of Gilligan and Lowe (1993) who found that practice managers felt no involvement in practice decisions and that the average GP is a poor manager with poor communication skills and has an inadequate idea of motivating staff. The results concerning perceived communication difficulty in the practice is discussed in chapter 8. However, for other occupational groups, the main sources of stress are overwork, both in terms of quality and quantity, role conflict and role ambiguity but for practice managers these stressors do not appear to be particularly important.

Coping

When asked about how they coped with stress and tension that they experienced, a commonly used coping strategy expressed by the practice managers was talking to friends and spouses. Other coping strategies used by the practice managers included having a drink in the pub, having a smoke, and taking a hot bath. When asked about how their stress could be reduced, suggestions included more training, improvements in communication, better working condition and social support.

We suggest that there is an obvious need for practice managers to improve and implement working systems within the practice and they must seek management training. While the patients are becoming more demanding, the shape of the practice organisation may have to change to cope with it (see chapter 8) and for practice managers there is an urgent need for further training in order to acquire new skills. This is discussed in chapter 8.

3. PRACTICE RECEPTIONISTS

Although the important nature of reception work in general practice is well recognised (Pritchard, 1981; Arber and Sawyer, 1982) there is no previous study addressing stress amongst receptionists at work. However a study by Freeman (1989) addressed the issue of the influence of receptionists on continuity of care in four group practices. Most receptionists thought that

the patients should see the same doctor but their influence seems to be very little compared with that of the doctors. In a group practice receptionists would find it easier to handle the appointment system if the workload was equally distributed among the doctors. The authors felt that with great variation in demands by the patients to see particular doctors, even a rigid practice policy would not help to solve the problem for the receptionists. It has been shown by Copeman and Van Zwanenberg (1988) that receptionists feel a lack of understanding by their GPs and unappreciated by the general public. They are taken for granted by the doctors and patients.

As there is more emphasis on primary health care team the responsibility of receptionists are becoming more complex. Therefore, we decided to carry out a pilot study on stress among receptionists so that training needs could be addressed. The study was carried out in 1993 in the North West Region of England. Semi-structured interview schedules were developed and piloted by the authors. These combined with open ended questions and probes concerning sources of stress at work, with a critical incident technique (Dewe, 1991). In the latter, respondents were asked to think of, and describe a recent incident or situation which they found particularly stressful, and to describe the coping strategies they employed. Twenty eight receptionists were selected from a variety of practices, for example, solo v group, urban v rural, and social mix areas. The interviews were carried out in their workplace and they were tape recorded and took between 35 to 90 minutes. Then the tapes were transcribed and thematic analysis was carried out.

The main sources of stress identified by the receptionists were patients demands for appointments to see a particular doctor, communication difficulty with patients/doctors/practice manager/practice nurse and other health care workers, interruption, immediate issue of repeat prescription, non-emergency cases to be seen in weekend surgeries, demand to collect repeat prescriptions on Saturdays, increase in workload due to change, communicating with deaf and elderly patients, prejudice, organisational problems, talking to people when extremely busy, dealing with drug representatives who come without appointments, dealing with emotionally upset patients (i.e. bereaved patients), depressed and aggressive patients. We shall describe only few of these.

Communication

The first major theme perceived was lack of communication. There was a widespread belief that the GPs and practice managers knew more about the situations than they were prepared to communicate. The receptionists felt uneasy because they believed that the GPs and the practice managers were not open with them. Also some receptionists felt that decisions were taken without involving them and decisions were often not communicated to them.

There was a widespread feeling among the receptionists that they are not being valued by their GPs and practice managers. A receptionist in a group practice said:

> 'Practice policies are made in the practice meetings but no one tells us what the doctors expect us to do. You only get to know about the new policy when things go wrong and you are simply told that you should have known. They don't value our work'.

Another receptionist expressed:

'Sometimes doctors don't help in stressful situations. When a patient telephones enquiring about something, the doctor may either be too busy to give advice or simply refuse to offer any help. You are then stuck with the problem, while the patient at the other end of the telephone maybe thinking that you are being obstructive to him/her'.

Another typical example:

'Patients think it is your fault if they can't see the doctor of their choice or if the doctor is running late'.

Discrimination/Prejudice

Racial prejudice and discrimination can promote feelings of inadequacy, inferiority and low self-esteem. Being members of a particular racial group can affect a person's response to stress. Also lack of role models in the workplace can create a stress situation and increase response to other stressors. This leads to role conflict for the racially different person (in this case an Indian receptionist). She feels stressed without the support of a sympathetic manager or a colleague. The following quotations are self explanatory:

> 'Whenever I take a problem to the practice manager she gives the impression that it was my fault. She follows one set of rules for me and a different one for other staff. Instead of any support she always treats me unfairly. The practice manager is inconsistent'.

> 'Sometimes the attitude of some patients towards coloured receptionists is appalling'.

> 'They give you racist remarks. Although I am Indian, they would call me that black girl. Even colleagues at times talk about this indirectly'.

Organisational Problems

This is one of the biggest problems in the practices that we visited during the interviews. In order to achieve the goals, practices need to work as a team and good work done by individuals needs to be appreciated. As one of the receptionists stated:

> 'Sometimes the problems do not get resolved by the practice manager. She does not appreciate my efforts. Often I do the good work but the credit goes to my colleagues'.

Another receptionist described about the doctors who do not appreciate their work:

> 'We are supposed to work as a team in the surgery. You can see that receptionists take all the abuse from the patients but don't get any support from the doctors. Doctors talk down to you. They expect us to carry on as if nothing has happened'.

Increase in Workload due to Change

The increase in workload due to the changes in the health care system has not only affected the doctors but also the office staff. They have to work hard to cope with increased typing, filing, recording data on the computer and also to cope with increased demand from patients. A receptionist voiced:

> 'There has been such a great increase in our workload, following the new changes, yet there is no backup for us'.

Drug Representatives

Some practices allow drug representatives to see doctors and nurses by an appointment system only, whereas in other practices there are no restrictions. Usually the representatives, like the patients, report to the receptionists first before seeing a doctor. It is not uncommon for some representatives to call at the surgery without an appointment wanting to see the doctors. The receptionists feel pressurised by these representatives wanting to see the doctors. As one receptionist said:

> 'Our practice manager is very strict about drug reps who come to see the doctors without appointment. I know one or two reps who never make any appointment and come to the reception and insist on seeing the doctor to hand over something to him. When I ask them to leave the object at the reception they make an excuse that it has to be delivered in

person. I find it hard to turn them away because sometimes the doctors break the rule and say.....'I really wanted to see him'. You see, where is the principle then. I feel like a piggy in the middle'.

Self reported critical incidence fell into two categories, interpersonal incidence and incidence reflecting a lack of communication. Interpersonal incidence involved relationship with general practitioners, practice managers and peers. Incidences reflecting lack of communication were also interpersonal in nature. However, the receptionists were able to describe affective and physical responses to specific critical incidence. Responses included a wide range of reactions including anger, frustration, resentfulness and feeling undervalued. For example, as a receptionist stated:

'I feel frustrated when I know I can't do anything about the situation. I get really angry'.

The results from the interviews revealed a number of problems with which the receptionists are concerned. The key issues are communication and other organisational problems. As mentioned earlier, GPs lack the understanding of the stressfulness of receptionist job. There is a clear need for training in communication skills for the receptionists, GPs and other primary care professionals. The GPs need to consider this and other organisational issues in dealing with stress at work. This is discussed in chapter 8.

4. STRESS IN NURSES

The nursing profession is so diverse that it is outside the scope of this book to describe individual branches. There have been a number of studies conducted on occupational stress among nurses. These pieces of research mostly have been carried out in hospital environments. However, we will focus on stress among practice nurses, district nurses, community psychiatric nurses and health visitors as these occupational groups relate to the primary health care team.

Before discussing sources of stress amongst nurses in the primary care setting, from our interview sample, we shall briefly review sources of stress in nurses in general. While there is very little literature available on sources of stress among nurses working in primary care, there are an enormous number of studies available on stress among hospital nurses in different branches, for example, midwives (Wheeler and Riding, 1994), mental health nurses (Power and Sharp, 1988), nurses working in operating theatres (Davis, 1989), intensive care units (Hague, 1987), hospices (Foxall *et al*., 1990) and nursing homes (Dunn *et al*., 1994).

Tyler *et al.* (1991) found that conflict with doctors was an important stressor for highly trained nurses and nurses in the private sector. Parker and Kulik (1995) found that levels of work support and job stress were both significant predictors of burnout. Higher burnout levels were significantly associated with poorer self-rated and supervisor-rated job performance, more sick leave, and more reported absences for mental health reasons. Leary *et al.* (1995) examined stress and coping strategies in community psychiatric nurses. The stressors included professional isolation, ineffective communication channels, and inadequate support, supervision and training. According to Cooper and Mitchell (1990) sources of stress for nurses include workload, organisational support, dealing with patients and relatives, role confidence and competence, and home/work conflicts. Gray-Toft and Anderson (1981) found that death and dying, conflict with other professionals and peers were other sources of stress. Other authors (Snape and Cavanagh, 1993) reported that a shortage of resources and too few staff were the major sources of stress in a group of neurosurgical nurses. A study by McNeely (1995) shows that lack of communication was one of the important sources of stress amongst nurses. In a recent study on two teaching hospital nurses Bennett and colleagues (2001) found that lack of managerial support was associated with negative mood states and low levels of work satisfaction. The key predictors of negative effect was lack of management support, job overspill, having to make decisions under time pressure and lack of recognition by the organisation. One of the authors (U. Rout) conducted a study on stress and satisfaction among district nurses in the North West of England. The major sources of stress isolated by district nurses related to time pressure, administrative responsibility, having too much to do, factors not under their control, interruptions, keeping up with NHS changes, and lack of resources (Rout, 2000). The highest levels of satisfaction were reported for the amount of variety in their job, and the lowest level of job satisfaction was reported for chance of promotion.

Bailey (1985) suggests that commonly shared sources of stress seem to emerge from at least six areas, workload, patient care, interpersonal relationships with colleagues (e.g. nurse-nurses, nurses-doctors), knowledge of nursing and nursing skills, types of nursing and bureaucratic-political constraints. These sources of stress can also be sources of satisfaction for some nurses (Clause and Bailey, 1980; Bailey, 1984; Birx, 1983; Steffen, 1980). For example, lower workload, support from colleagues in organisations, and working within desired types of nursing, all provide satisfaction for nurses (Clause and Bailey, 1980). The question may be asked, why do some demands give rise to stress to some and satisfaction to others. One may appraise these demands as a challenge and opportunity others may appraise these as threatening. As Shakespeare wrote in Hamlet (IIii), 'nothing is either good or bad but thinking makes it so'.

5. PRACTICE NURSES

The authors are unaware of any studies on stress among practice nurses but one recent comparative study on primary care professions in the North West region of England found that the work done by practice nurses has increased many fold after the introduction of the 1990 contract (Rout and Rout, 1997). Theoretically, stress can occur not only when the demand on an individual exceeds his/her perceived capability (overload), but also when capability exceeds the demand (underload). But in practice nurses' workload, stress is invariably the demand exceeding capability type and work underload is not a common feature of nursing except in some minor repetitive job. This implies that stress among practice nurses is an area worth exploring. According to the data from the RCN's Daphne Heald Research Unit (Practice Nurse, Dec 1994) job satisfaction was much higher among practice nurses than health visitors and district nurses, but they expressed their unhappiness at GPs' attitude towards them as money spinners rather than health professionals. A practice nurse expressed that she gets extra pressure from GPs but no support. In a quantitative study one of the authors (Rout, 1999) compared job stress, job satisfaction and mental well being of practice nurses and GPs in England. It was found that GPs had lower job satisfaction and greater pressure at work than practice nurses. Practice nurses reported lower scores on anxiety and depression. The major sources of stress for practice nurses were dealing with the terminally ill and their relatives, time pressure and administrative responsibility. One interesting finding was that although the practice nurses had a high workload, they also reported high autonomy in the management of that workload.

In another study we compared job satisfaction of practice nurses with other primary care professionals and it was found that practice nurses were more satisfied in their job than GPs, practice managers, receptionists, district nurses and health visitors (Rout and Rout, 1997). This suggests that the practice nurses indeed are a satisfied group of professionals who enjoy their freedom of choice to work in the general practice environment. Our qualitative study on practice nurses is described below.

We conducted in-depth research with 15 practice nurses to identify the sources of stress among them. The study was carried out in five areas of Greater Manchester, Salford, Bury, Bolton, Rochdale and Stockport chosen by pragmatic consideration. An interview procedure was followed, similar to the ones adopted for practice managers and receptionists.

The nurses reported that lack of job description, time pressure, patients' attitudes, doctors' attitude, communication, sexual harassment from male patients, patients who do not speak English, and patients making appointments for one thing but asking for advice for others were the main sources of stress.

Lack of Job Description

Lack of job description may create relationship problems among different professionals . While district nurses are employed by the Health Authorities/Community Trusts, practice nurses are employed by their GPs but their main aim is patient care. However, there are some areas where their roles and duties can be conflicting. As one practice nurse said:

> 'There is always some overlap between my job and the district nurse. My job description has no clear boundary. We don't have good relationships with district nurses'.

Patients' Attitude

The attitude of some patients can make the nurses feel frustrated and undervalued. The following two quotations are self explanatory:

> 'Some patients come with pre-conceived ideas on health issues learnt from women's magazines, TV or radio, for example, cholesterol and heart disease. There are still controversial opinions on diet and treatment. When I try to explain, they do not accept that. They think that the nurse knows less than the doctor. It is very annoying'.

> 'Some patients think doctors are too busy but nurses have bags of time. Some of them simply come to have a chat, others come for counselling without realising that nurses are not counsellors'.

Time Pressure

Some of the nurses in our interview sample felt pressurised for time as they had to cope with various tasks within a limited time. When one task takes longer than expected then a backlog builds up creating stress for the individual (in this case for the practice nurse). This is illustrated in the following quotations:

> 'Some drug representatives come to see us with an appointment of 5 minutes but invariably take more than 15 minutes. I have so much to fit in. I feel pressurised for time when I see these drug reps'.

> 'Some patients demand your attention when you have a lot to do..... Someone may come for a blood pressure check up and then start talking about yesterday's car crash on Market Street'.

'I am always running late finishing my job because patients are being sent by doctors and receptionists without realising I am engaged in paperwork and some patients just knock on the door without any appointment'.

Sexual Harassment/Aggression

All the nurses we interviewed were women and some of them felt that they were disadvantaged because of their gender. Sometimes the public develop misconceptions by watching comedy programmes where nurses are painted as playing sexy roles. The following quotations are self explanatory:

'People get the idea from the media that nurses are sexy. Some men think we are easy prey with suspenders and short dresses and this is annoying'.

'You may think that you are safe to attend elderly men but in reality it may be different. I feel uneasy while going to elderly men's houses as some of them, although not aggressive, do make sexual advances while I am attending to their medical needs'.

'Some drug addicts can be very abusive and aggressive and I've seen some of them carrying knives. There is always a fear of being beaten up. I really get frightened because there is no panic button in my room'.

Communication

Although practice nurses get job satisfaction while working in primary care setting, they feel lonely at times. They expressed that there was a lack of communication between doctors and nurses. Two of the practice nurses asserted:

'I like working here because there is no hierarchical system like hospitals but it can be too lonely. As a nurse you are in an isolated room in the surgery on your own, you have no one to talk to'.

'My doctor has no appointment system, so when a patient comes to see me I would not know whether he or she has been to see the doctor. If he/she has been to see him I don't know the actual conversation between the doctor and the patient. Also, I don't have the patient's record. The doctor should communicate to me before sending the patient to me'.

Doctors' Attitude

Some practice nurses commented that the doctors' attitudes towards them have not changed even though they are not working in a hospital environment. As a nurse commented:

'They perceive us just as a pair of helping hands'.

A nurse working in a single handed practice commented:

'My doctor does not understand that I should have holidays according to my schedule. Perhaps he does not like to go away for a break as it would cost him for his locum or perhaps he wants to catch up with his minor surgery list'.

It is not uncommon for doctors to send patients to see the nurse straight away knowing fully well that nurses run an appointment system. The following quotations from the interview sample explains this:

'I hate it when I have a queue of patients and I can't see them properly. On top of that I get frustrated when the doctor asks patients to come to see me straightaway without asking me about my booking, I really get annoyed'.

'It is frustrating when you are doing a dressing and the doctor sends another patient without any prior notice. Sometimes I have to rush especially if there is an ECG to be taken. The job I was doing gets interrupted'.

'Doctors don't allow me to do everything that I want to do'.

Administration

Although nurses are mainly responsible for patient care they do often have to fulfil certain administrative responsibilities which can be quite pressurising. As a nurse commented:

'Towards the end of the month it is very stressful as all the claim forms are supposed to be ready to be sent away for payment for example FP34D (claim form for drugs dispensed), FP 1001 (claim form for contraceptive services provided), FP1002 (claim form for intrauterine devices fitted) and FP/MS (claim form for minor surgery)'.

Job Satisfaction

In spite of all the stressors, some practice nurses felt that they got pleasure working in a general practice set-up rather than in hospital setting. They had the independence to get on with the job in a primary care set up as opposed to a hospital environment. They felt very satisfied with their job because there was no interference from the doctors. For example, as one nurse said:

> 'In our practice the doctors send us to different training courses. Here we get on well. It's not the same in hospitals. We have our independence, they don't tell us what to do. Our practice manager knows our role very well. We have lot of freedom here'.

The information given by the practice nurses shows a clear indication of stressors. Perceived lack of communication with doctors and other members of the primary health care team was one of the major sources of stress. We shall discuss this issue in chapter 8. However, they were very satisfied with their job which replicates our finding from quantitative studies.

In summary, these professionals (practice managers, practice nurses and receptionists) have a lot in common and they play active roles in the primary care setting. They all felt that their jobs were stressful. The main sources of stress are as follows: time pressure, patients demand, administration, communication, organisational issues, paperwork and NHS change. These issues will be discussed in chapter 8.

Next, we have described the sources of stress amongst district nurses, health visitors and community psychiatric nurses together because they are employed by community trusts, not by the GPs and they are mostly attached to defined practice/s. The results from our qualitative studies on these professionals are given below.

6. DISTRICT NURSES, HEALTH VISITORS, AND COMMUNITY PSYCHIATRIC NURSES (CPN)

District nurses, health visitors, and CPNs form an integral part of the primary health care team. Recent changes in the NHS have affected the work pattern of all these professionals. The authors have gathered information on the sources of stress and their coping strategies by extensive interviews. The main sources of stress are as follows: time pressure, lack of resources, administration/paper work and staff shortages.

Time Pressure

District nurses, health visitors and CPNs exclusively work in the community (i.e. at patients homes and health centres). This involves travelling from place to place and dealing with patients' existing problems and planning on any new problems encountered while attending to the patients. Obviously this is time consuming and as a result their timetable gets out of schedule. These nurses also feel that patients, and their relatives in particular, are very demanding. Now-a-days they want to know the exact time of arrival of the nurse in their house for the home visit. As a district nurse highlighted:

> 'Patients are aware of the patients' charter and they know what their demands are. If you are late for your appointment they can wave the patients' charter leaflet at you and tell you straight away that you are late. They don't understand that there are many other people worse than their own condition requiring more attention..... I wish I had more time in hand to finish my job'.

A CPN expressed:

> 'I follow up patients at home and make an assessment of their condition. Some patients are hostile to the idea of follow up and don't allow me to enter their house, instead they argue about their rights and consume time for unnecessary reasons. Spending time in this way throws my time schedule out of routine'.

Lack of Resources

Recently many health professionals have experienced financial restrictions in providing services due to lack of resources. They are unable to meet the increased expectations of the patients. As a district nurse commented:

> 'Patients have become very demanding. They expect everything to be done for them then and there. A lot of them talk about the new patients' charter and about their rights to everything. They don't realise that there are financial restrictions that are imposed on us. They don't like it when we ask them to buy something like incontinence pads while we put their name on the waiting list for a free supply. These days relatives are very reluctant to offer any simple help'.

A CPN gave another typical appraisal of this stressor:

> 'I enjoy my job as long as I am able to render my services to the patients. We are being asked to provide speedy services without extra resources, for example, not having enough places to provide accommodation to some urgent cases'.

Administration/Paperwork

The new changes in the NHS have brought an increased amount of paperwork. The managers insist every action is reported to them in the format devised by them. These professionals feel that the paperwork is taking a large amount of their time without any benefit to patient care. As a CPN described:

> 'I enjoy my work and I am not against change but I don't like to spend time on paperwork to satisfy my managers. They are asking us to produce reports on each and every case. They are supposed to provide us secretarial help but in real life you end up doing everything by yourself.

A district nurse who found paperwork as a major stressor said:

> 'I have a feeling that my managers are more bothered about written reports than actual patient care'.

A health visitor expressed:

> 'We have a big responsibility for children in the community. We have to prepare pages of reports for case conferences on problem cases such as parental negligence, child abuse etc'.

Staff Shortages

The market economy introduced to the NHS has made the managers conscious of their balance sheets. It has been expressed by some of the district nurses, health visitors and CPNs that during certain periods when their colleagues are on holidays the managers don't always employ temporary staff. This increases the workload of remaining workforce which may add more stress. As a district nurse admitted:

> 'We have a good understanding among the staff and we try to cover each other in case of need but when someone is on holiday the managers should provide adequate cover by employing temporary staff or 'bank' nurses. They try not to do that in order to save money and when they do, they employ someone of a lower grade. On the one hand the patients

demand more and on the other hand, the managers don't provide enough staff'.

A CPN stated:

'Our managers want us to respond to any urgent requests made by patients to visit them within two hours. Its fine when you have adequate staff to cover but if there are people on leave or absent due to sickness there are no replacements. I feel really stretched during staff shortages'.

Coping

A common coping strategy was 'talking to colleagues'. However, they expressed that they had to relax at the end of the working day and they utilised different methods for this such as: listening to their favourite music, reading a novel, going to a beauty clinic, having a massage, watching a video, going out for a drink, dancing and doing keep-fit exercise.

The information given by these professionals gives clear indication of where the perceived problems lie. It was mentioned that lack of resources, staff shortages, administrative work and time pressure were the major sources of stress. The new administrative procedures require the staff to spend a substantial amount of their time in dealing with paperwork, which could be utilised for providing services to the patients. The government need to provide more resources to primary care. This is discussed in chapter 9.

In this chapter we have considered sources of stress in certain groups of primary health care professionals. The themes common to many of these groups are communication difficulty, time pressure, increased demands from patients, work overload and organisational change. Some of the potential sources of stress could be minimised by the openness of the primary health care team members and by improving communication skills. Although some potential stressors are inherent to the job and cannot be eliminated, it is essential to have training to improve communication, managerial and social skills. This is discussed in chapter 9.

Chapter 7

STRESS MANAGEMENT: INDIVIDUAL STRATEGIES

In the preceding chapters we have seen that stress can create several physical, psychological and behavioural problems for individuals. In chapter 6, we identified a number of factors, for each primary care professional, which put them under pressure. It is important for the individual and the organisation to adopt necessary strategies to deal with stress at work. We shall consider individual strategies of dealing with stress in this chapter and organisational-level stress management intervention programmes will be considered in the next chapter.

DeFrank and Cooper (1987) classify stress management programmes into two levels of intervention i.e. at the individual level, and at the group or organisational level. Sometimes a combination of programmes is offered in organisations. Murphy describes three types of workplace interventions for stress reduction and prevention: employee assistance programme (EAP), stress management training (SMT), and stress reduction strategies. The first two target the employee and the final one the environment (Murphy, 1984). Stress reduction techniques are taught to try to reduce the individual's personal vulnerability to stressors. These techniques are meditation, relaxation, and different methods with a cognitive focus. This chapter will concentrate on these techniques.

1. MEDITATION

The meaning of meditation is 'exercising the mind'. Individuals who meditate report being calm. They may appear calm and quiet, but remain quite alert at the same time. There are many good articles on meditation theory and history (for example, Pearce, 1982; Bond 1986; LeShan, 1974).

Two Eastern approaches of meditation from Hindu philosophy are internalised into Western practice. These approaches, called Mantra and Yantra meditation, are derived from Hindu Sanskrit words (Petersen, 1979; Wood, 1969). These can be exercised to induce relaxation and to explore self-awareness.

1.1 Mantra Meditation

Mantra meditation deals with sounds and phrases; for example, a neutral word or a verse from a prayer is repeated again and again to aid concentration. Several Sanskrit words in yoga qualify as Mantras. For example, 'Ram, Syam, Om, or Ahhom'. Ram and Syam are names of Hindu Gods and 'Om' is regarded to be the basis of everything. Another traditional Hindu Mantra is 'Om Namah Shivaya' meaning 'I bow to Lord Shiva'. Moslems use 'La ilaha illa llah' meaning 'There is no God but Allah', a line from the Koran. Jews and Christians pray 'Amen' at the end of their prayer.

However, mantras do not have to be sacred or religious. Researchers have shown that nonsense syllables or simple words like 'one' or 'calm' or 'relaxed', 'harmony' can be repeated by the meditator to produce relaxation experience and meditation (Petersen, 1979; Benson, 1980). Therefore, primary health care professionals could practice Mantra meditation without objecting to it on grounds of their religion.

1.2 Yantra Meditation

During practising Yantra meditation the individual needs to adopt a visual image (such as a candle or an abstract shape) to exterminate distracting thoughts from the mind. The object of concentration can be anything. It is necessary for them to choose the object of their choice. In religious practice, the object of meditation is God. However, ultimately the idea is to concentrate on one thing only at a particular time.

One has to sit cross-legged or in any comfortable position in a quiet place and has to attend to the visual image. It is important that one should not stare at the visual image but should allow the thoughts to come and pass away naturally. Eventually, the mind becomes clear and bright. When distracting thoughts disturb the mind, attention should be given to the natural rhythm of breathing. This would prevent the disturbing thoughts and produce the meditative state.

1.3 Transcendental Meditation (TM)

Transcendental meditation (TM) is a type of meditation with religious overtones. The origin of TM can be traced back more than a thousand years when the movement was begun by Maharishi Mahesh Yogi of India. The procedure uses techniques of breathing, visualisation, relaxation and repetition of Mantra (Nideffer, 1976). TM is used as a method of improving physical and mental health and reducing stress (Benson, 1984). Benson (1974) investigated TM and its impact upon stress reduction and developed another technique, named secular meditation, which duplicated the results of TM (i.e. drop in the rate of metabolic function - such as, reduced systolic, diastolic blood pressure, heart rate and respiratory response). It is recommended that the relaxation response 'can act as a built-in method of counteracting the stresses of everyday living, which bring forth the fight-or-flight response' (Benson, 1974).

In an experiment, it was found that meditators responded 30 per cent faster and more accurately than non-meditators to a key-pressing task (Bloomfield *et al*., 1975; Petersen, 1979). It was argued by the researchers that the meditators were in a state of 'restful alertness' and the non-meditators became tense before pressing the selected key, which slowed them down. The investigators conclude that meditators can develop the combination of relaxation and alertness. Studies have also found that TM lowered anxiety, increased job satisfaction and improved work performance (Kuna, 1975). One could follow the steps given in box 7.1 for practising meditation. Although most meditation approaches emphasise the sitting position during meditation, TM does not have any preference for standing or sitting (Layman, 1980).

Box 7.1

1. Choose a calm, quiet environment and make sure that you have a comfortable sitting position with eyes closed.
2. Do not cross your arms or legs.
3. Choose a word or phrase (Mantra) that can be repeated again and again silently.
4. Make sure that your breathing is regular by concentrating on deep breathing ('inhale', 'exhale', 'inhale', 'exhale').
5. It is important to adapt a passive attitude and disregard distracting thoughts. Each time you become aware of the distracting thoughts, bring your mind to the 'word' of your meditation. The sound of the Mantra disappears as the mind experiences subtler levels of thought.

2. RELAXATION

The most popular relaxation procedures can be categorised as progressive relaxation, transcendental meditation, autogenic training and biofeedback. These procedures are unique in their own way. However, they all produce the same physiological result, i.e. resulting in the relaxation response.

The 'purpose of relaxation training is to reduce the individual's arousal level and bring about a calmer state of affairs from both psychological and physiological perspectives. Psychologically, successful relaxation results in enhanced feelings of well-being, peacefulness, a sense of control, and a reduction in felt tension and anxiety; physiologically, a decrease in blood pressure, respiration, and heart rate should take place' (Matteson and Ivancevich, 1987). There are several excellent books written by stress management consultants on relaxation and stress control. Relaxation is a skill to be learned and requires motivation, effort and commitment. There are simple relaxation techniques, which anyone can practice.

2.1 Deep Muscle Relaxation

When the hypothalamus (part of the brain that controls stress-response) is stimulated by a variety of sensory impulses, it becomes highly charged. Then, each and every stressor could easily lead to a stress-response. It is important to cut down the sensory impulses going to the brain by lying down, closing the eyes and deeply relaxing the body. By doing this both body and mind can return to a state of equilibrium and restore the balance. Deep relaxation can help in preventing the build up of tension, fatigue and anxiety.

Using the deep relaxation method, Patel and her colleagues (1973,1975, 1985,1987, 1988,), found a reduction in high blood pressure and the risk of having a heart attack in the future and improved quality of life. The technique is based on yogic exercise.

Through a screening programme in one industry, Patel *et al.* (1985) identified 192 males and females who were at higher than normal risk of developing heart disease. The criteria they chose were the presence of the following three factors: 1) mildly raised blood pressure not considered high enough for drug therapy, 2) mildly elevated serum cholesterol for which only dietary advice was given, and 3) ten or more cigarettes smoked in a day. The researchers divided the subjects randomly into two groups, control and treatment group. Both the groups were given advice to reduce the intake of saturated fat and salt in their diet, to stop smoking, and also relevant information on high blood pressure. In addition, the treatment group was

given training in physical and mental relaxation and stress management techniques. They checked the blood pressure of the treatment group on occasions, after 8 weeks, 8 months, and 4 years. It was found that the level of blood pressure was significantly lower at each of the three examinations. Over the four years, there was only one abnormality of the ECG in the treatment group, while in the control group there were six cases of CHD, including one fatal attack. In another similar study Patel *et al.* (1988) observed 5 cases of CHD in the control groups compared with one complication in the treatment group. The authors suggest that the same repeated results are unlikely to be due to chance alone. The advantage of this therapy over the drug treatment was its absence of side effects from drugs and a better quality of life.

Deep muscle relaxation should be practised in a quiet and comfortable place, by lying on a bed or on the floor or sitting on a comfortable chair. The instructions are given in box 7.2 from Patel (1989):

Box 7.2

Lie down in a comfortable position. Make sure your head, body and legs are in a straight line. Keep your legs a little apart and allow your feet to flop loosely so that your heels are pointing inwards and your toes are pointing outwards. Keep your hands by your side with palms upwards and fingers slightly flexed.

Close your eyes. Fill your lungs very slowly, starting at the diaphragm and working right up to the top of the chest, and then very slowly breathe out. Allow your breathing to become normal and regular after two to three slow breaths. Breathe in and out gently and rhythmically using your diaphragm. Don't force your breath. Be aware of your breathing pattern. Feel the subtle difference in the temperature of the air you are inhaling and exhaling. The air you breathe in is cooler and the air you breathe out is warmer.

Now you are consciously going to relax each part of the body in turn. Relaxation means the complete absence of movement. You should concentrate on the part you are relaxing.

Take your mind to the right foot and relax the toes, heel and the ankle. Then move your attention slowly up, relaxing your leg, thigh and hip. Feel all the muscles and joints of your right leg becoming completely relaxed. Relax as deeply as you can. Just keep your awareness to this feeling of deep relaxation in your right leg for a few seconds.

Now take your mind to your left foot and repeat the process, working up the leg, thigh and the hip as before. Let all the tension ease away and enjoy the feeling of relaxation for a few seconds.

Then concentrate on your right hand. Relax the fingers, thumb, palm and wrist. Move your attention up to your forearm, upper arm and the shoulder. Feel every muscle and joint in your right arm becoming deeply relaxed. Concentrate your attention on this feeling of relaxation in your right arm for a few seconds.

Next become aware of your left hand and relax the fingers, thumb, palm, wrist, forearm, upper arm and the shoulder. Let all the tension ease away from the left arm.

Next concentrate on the base of your spine, vertebra by vertebra, relaxing each vertebra and muscles on either side of the spine into the floor. Relax your back, first the lower back, then the middle back and finally the upper back. Release all the tension from your back. Let the relaxation become deeper and deeper, feel the back merging with the floor.

Next, concentrate on neck muscles. Let all the muscles in the front of your neck relax. Let your head rest gently and feel the back of the neck relaxing.

Next, relax your chest. Every time you breathe out relax a little more. Let your body sink into the floor a little more each time. Let all the nerves, muscles and organs in your chest relax completely. Relax the muscles of your stomach completely.

Next, concentrate on your face. Let the jaw relax so that it drops slightly. Relax your lips, teeth and tongue. Relax the muscles around your cheek bones and your eyes and the muscles around your eyes. Relax your forehead and let all the muscles in your forehead become completely relaxed. There is no tension in your facial muscles. Now relax the muscles around your head. Now your body is completely relaxed.

2.2 Progressive Muscle Relaxation

Progressive muscle relaxation was developed by Jacobson (1929, 1976). Modern progressive relaxation techniques are variations of Jacobson's work in the early part of twentieth century. These are very effective in reducing stress (Rimm and Masters, 1979). One of the reasons why muscle relaxation reduces psychological stress is that the method tends to arouse pleasant thoughts in the individual (Peveler and Johnston, 1986).

In Jacobson's technique the subject must tense the muscle before relaxing it. This helps to differentiate between tension and relaxation. Relaxation procedure involves systematically tensing and relaxing specific muscle groups. The training procedure lasts several months and requires a great deal of practice in the beginning. However, the ultimate aim is to produce a relaxation response to counter stress in a particular situation.

Progressive relaxation should be practised twice a day for 10-20 minutes, once in the morning and once at night before going to bed. However, each individual may relax at his/her own rate. It should not be practised just after a heavy meal. One must find a comfortable position to sit or to lie down to practise relaxation.

3. AUTOGENIC TRAINING

Autogenic training is very similar to progressive relaxation in many ways. There are six psychophysiologic exercises. The basic technique of autogenic training (or Autogenic Regulation Training, ART) was developed by Schultz (1959), a German Psychiatrist, and utilised by Luthe (1963). Individuals repeat a series of phrases mentally by giving themselves instructions to different parts of their body. Before moving into the next exercise the subject must practice the previous exercise until the desired results are obtained.

Researchers reported several benefits of autogenic regulation training. For example, episodes of insomnia, tension headaches, and asthmatic attacks are reduced (Wiltkower and Warnes, 1977; Rosa, 1976). Others have found that autogenic training practice regulates heart rate, reduces respiratory functioning and decreases blood pressure and muscle tension (Schultz and Luthe, 1959; Luthe, 1963; Luthe and Blumberger, 1977). Bailey reported that individuals who practice autogenic training report relaxation, peace, tranquillity, and well-being (Bailey, 1985). The response generated by autogenic training appears to be psycho-physiologically similar to Benson's relaxation response (Bakal, 1979; Benson, 1980).

Self-hypnosis plays an important role in autogenic training (Ulett and Peterson, 1965). According to Quick and Quick (1984) autogenic training is a method of self-hypnosis, which 'emphasises the development of individual control over physiologic processes through organ and symptom specific exercises'. Although, autogenic training can be self-taught, it is preferable to learn from a qualified supervisor because this might have adverse effects (e.g., palpitation). One has to adopt a passive attitude while practising autogenic training and could practice three to four times a day. Autogenic exercises involve the individual giving instructions of heaviness, warmth and peacefulness to his/her limbs. It can be practised in any position as long as the practitioner is comfortable. It is important that one should not suffer from heart disease or alcoholism which prevents the individual practising autogenic training (Bailey, 1985).

Bailey (1985) describes a 6 week schedule of autogenic training, which can be practised by individuals. The exercise needs to be practised in the

consecutive weekly exercise, 3 times per day in sitting or reclining position. See Bailey (1985) for instructions for six weeks schedule of autogenic training.

4. BIOFEEDBACK

Biofeedback training uses instruments to help individuals control responses of the autonomic nervous system. Body signals can be displayed by various means (for example, lights, sounds). For example, an individual monitors an auditory signal of his/her heart rate or muscle tension and tries with different thoughts and feelings to slow the heart rate or to reduce the muscle tension. When the individual recognises the feelings associated with decreased heart rate or muscle tension, the equipment is removed and the individual learns to control his/her own heart rate or muscle tension.

Biofeedback training can be helpful for people suffering from anxiety where they learn to reduce tension and anxiety indirectly by reducing functions of sympathetic nervous system. This in turn lowers arousal and prolongs relaxation. Biofeedback training has been used as a method for stress management by helping individuals learn to relax specific muscles (Quick and Quick, 1984). However, it is suggested that one needs to combine biofeedback with lifestyle change and cognitive coping strategies to obtain satisfactory long-term results (Rice, 1992).

5. SYSTEMATIC DESENSITISATION

Wolpe (1958, 1973) developed the process of systemic desensitisation. This is a method for reducing stress, and is based on the view of classical conditioning. This method involves a process of reversing the associations that have been established previously between some environmental event and the stress response (Rimm and Masters, 1979). This method is used in dealing with specific stress reactions such as phobias and anxiety. For example, an individual with a fear of heights could be desensitised to this phobia through a series of systemic approximations to the fearful objects.

Before starting the desensitisation, the individual must have had adequate relaxation training. Also, a hierarchy of situations with their threat potency should be constructed. The aim of the hierarchy of the situation with their threat potency is to bring the individual into contact with the source of fear, gradually. For example, while imagining the feared object, the individual becomes relaxed. The feared object becomes associated with relaxation. More intense images of the feared object are presented until the

individual maintains relaxation while imagining the intense, feared object. Then the fear response is terminated.

Box 7.3 shows how a receptionist dealt with a frightening situation by using systemic desensitisation. The receptionist was made to imagine each of the scenes while feeling calm, relaxed and comfortable. The entire process of systematic desensitisation took several sessions after which Miss F, (the receptionist) was able to deal with the patients. Alternatively, the psychologist could accompany the receptionist to the reception desk and help her to achieve a relaxed state there.

Box 7.3

Miss F was a receptionist in a group practice. One day a patient came without an appointment while Miss F was at the reception desk. (The reception area was separated from the waiting room by a long desk). The patient demanded to see a particular doctor immediately. Miss F explained that there was no appointment available, but if he was prepared to wait he would be seen as an emergency by one of the doctors. He was impatient and wouldn't accept any alternative. (Miss F was simply following the doctors' instructions and was not in a position to let him see a doctor immediately on demand). He suddenly became aggressive and verbally abusive. Miss F became very nervous and frightened. She approached the practice manager who took over the charge of dealing with the patient.

Miss F stayed off sick for several weeks. She was a sincere worker and the practice manager felt her absence. The practice manager learnt from Miss F, that she was frightened of facing patients after that incidence. She discussed the matter with Miss F and was able to persuade her to come back to work. A clinical psychologist was appointed by the practice manager who carried out systematic desensitisation in the following manner by following a hierarchy:

1. Miss F was made to go to the psychologist's office and taught to associate a relaxed state with thoughts of being in the reception area.
2. The next stage was that Miss F made to imagine the association between relaxed state and being at the reception window.
3. Then Miss F was made to think of calling patients to come to the reception desk.
4. Next step was to imagine dealing directly with different patients.
5. Finally, she was made to imagine as clearly as possible the association of her relaxed state with the image of the patient who was aggressive to her in the first place.

6. STRESS INOCULATION TRAINING

Meichenbaum (1979) developed the stress inoculation training approach. It is a cognitive approach to the management of stress, and achievement of personal goals (Meichenbaum and Cameron, 1983; Meichenbaum and Turk, 1982). Stress inoculation occurs in three stages:

- The first stage is conceptualisation where the individual understands the causes of stress. This understanding occurs through discussions between the therapist and the patient.
- In the second stage (skill acquisition and rehearsal) the individual learns behavioural and cognitive skills (for example, he/she may learn relaxation and desensitisation, cognitive re-definition, social skills training) and practises these skills.
- In the third stage (application and follow-through) the individual applies the learnt coping skills in the real world.

Bailey (1985) illustrates a useful example of stress inoculation training (SIT) format which shows how it can be utilised for the practice of personal control over stress (see Bailey, 1985). According to him, SIT involves four phases, i.e., educational, behaviour-rehearsal, application and self-reinforcement. This is similar to the previous three-stage explanation. Bailey (1985) suggests that the education and behaviour rehearsal phases permit the individual to:

1. prepare for a threat that induces threat
2. confront and deal with stress-inducing threats
3. cope with feeling of inadequacy or being overwhelmed
4. achieve self-reinforcing statements, which lead to personal control over stress.

7. BREATHING EXERCISES

Breathing is an involuntary, automatic function, controlled by the autonomic nervous system. This reflects our general state of stress arousal. However, breathing is also voluntary and can be manipulated by an act of will. By controlling breathing the individual can control tension. One should learn correct breathing techniques, which play an important part in the prevention of respiratory ailments (e.g., asthma, emphysema). Through practising breathing exercises the individual will be able to regulate breathing patterns and increase oxygenation capacity. Mainly there are two types of breathing:

1. Costal breathing includes upper costal breathing and middle costal breathing. This type of breathing is identified by an outward and upward

movement of the chest wall. It is beneficial during vigorous exercise but it is not suitable for every day activity.

2. Diaphragmatic or abdominal breathing. Breathing with the diaphragm is the most important method available for stress management. This method aids even movement of breath which helps to strengthen the nervous system and relaxes the body. During diaphragmatic breathing, the diaphragm contracts and pushes downwards making the abdomen relax. As a result, the lungs expand to create a vacuum and draw air into them. During expiration the diaphragm relaxes, the abdomen contracts and the air gets expelled. This method of breathing provides the body with sufficient oxygen and gets rid of carbon dioxide. This relaxes the body and the mind. Also this method acts to correct shallow breathing habits. An example of abdominal breathing exercise is given by Patel (see Patel, 1989).

8. COGNITIVE RESTRUCTURING

Cognitive restructuring is a technique by which stress-provoking thoughts or beliefs are changed for more constructive ones, which can promote individuals' well-being (Mahoney, 1977). The most widely used technique for changing irrational cognitions was developed by Albert Ellis (1962, 1977) and is called Rational Emotive Therapy (RET). According to RET, stress often arises from 'irrational beliefs' or faulty training. Ellis (1977) described the A-B-C-D-E paradigm to help the individual in disputing his/her irrational beliefs and construct healthier alternatives. An example is given in box 7.4.

Box 7.4

Jill was considered as the most efficient secretary in the surgery. One day she entered Mr L's (a patient in the practice) blood report into Mr M's (another patient in the surgery) records. When Mr M went to see the doctor he was told that he had developed blood cancer. Mr M was devastated at the news. Arrangements were made for him to see a consultant in hospital. The next day Mr L went to see the doctor and at this point it was discovered that Jill had misfiled the blood report. Jill was reprimanded for her mistake. Because of her fault Mr M had to go through severe distress. If the mistake had not been spotted the consequences could have been worse. Jill was devastated at this incident. She regretted for her mistake. She lost confidence, felt guilty and later became anxious and depressed. She was ashamed and felt that she was totally worthless. Jill was treated with RET.

A - represents an activating situation or experience.

B - refers to certain beliefs that the individual carries response in 'A'. Jill focused on irrational thoughts, thinking, 'I am useless', 'I am good for nothing'. Instead her thoughts could be rational such as: 'I suppose I deserve to be told off', 'I should be more cautious and responsible'.

C - refers to the behavioural, emotional and physiological consequences of B. Jill became anxious and depressed which is inappropriate. The appropriate consequence could have been feeling disappointed and promising to be vigilant next time.

D - stands for disputing irrational beliefs while at therapy. This involves differentiating between true concepts (such as, 'I wished I could have been careful', and irrational one such as, 'I am totally useless').

E - refers to the effect of the therapy. This incorporates a restructured belief system. With the therapy effect Jill would be able to cope with the work environment confidently.

Another approach similar to RET - called cognitive therapy, attempts to restructure the thought pattern. This approach, proposed by Aaron Beck (1976), can help in the management of stress. However, it focuses mainly on treating depression. The subjective responses to situations and associated physiological responses can be changed by changing individual's interpretation of the situation. The cognitive approach has been used successfully in treating stress-related problems, i.e., anxiety and depression (Beck, 1976).

9. CONSTRUCTIVE SELF-TALK

Quick and Quick (1984) recognise that 'constructive self-talk' helps people cognitively to reappraise stressful situations. They describe this as 'intermittent mental monologue'. When an individual engages in 'positive self-talk', he/she can achieve positive results. On the other hand, if the individual engages in 'negative self-talk', he/she will achieve nothing and continue to be under stress. It has been suggested that constructive self-talk is not just positive thinking but a form of guided self-dialogue (Meichenbaum, 1985).

The therapist encourages the person to recognise his/her negative self-talk. When it is recognised, it is written down sentence by sentence. Then an alternative to negative self-talk sentences are developed, the opposite to each original sentence. See Table 7.1 for examples of situations, 'mental monologues' and alternative strategies for constructive self-talk.

Table 7.1. Constructive self-talk

Situation	Negative self-talk	Constructive self-talk alternative
A GP on his way to attend a hearing of complaint brought against him	I may be found guilty.	I've done nothing wrong.
	I may be fined.	I don't have to worry.
	I may lose my job.	I have indemnity policy and know someone else who went through the same situation and nothing happened to him.
A receptionist waiting to see the practice manager after a patient made a complaint against her	I will be reprimanded for I was wrong.	I have all my colleagues to back me up.
	I will feel embarrassed to come back to the office.	This man has made complaints against everyone in the office and they all have seen the practice manager.
A GP on the way to the surgery get a flat tyre	Oh God! Patients will panic and there will be chaos in the surgery.	Well people will understand about the traffic. They will think I'm stuck in the traffic.
	I can never finish my surgery on time	I shall take it easy, maybe I can finish surgery if my partner can take all the visits.

10. MULTIMODAL THERAPY

It is usually revealed by therapists that when a person enters therapy they have had multifaceted problems. Therefore, it is insufficient to use one particular method in treating that individual. In this case many different approaches are used by therapists. The concept of multimodal therapy was introduced by Arnold Lazarus (1981). In this technique the individual's problems are separated into levels and appropriate methods are chosen for each level by the therapist. Lazarus (1986) believes that the multimodal assessment procedures involve the therapist assessing the individual from seven discrete modalities (comprised of an entire range of personalities), they are as follows: Behaviour, Affect, Sensation, Imaginary, Cognition, Interpersonal relationships, the need for Drugs. The first letters yield BASIC ID, an acronym, which is easy to remember (Lazarus, 1986).

The therapist in association with the individual 'determines which particular problems, across the BASIC ID, are most salient' (Lazarus, 1986). 'The major danger of multimodal therapies is that the individual may be overwhelmed by too many techniques and hence it is essential that the

therapist should limit the number of techniques and explain to the client the rationale of using particular methods for specific treatments' (Roskie, 1991).

11. PHYSICAL EXERCISE

Life was physically very active for our ancestors. Modern living, by comparison, makes our lifestyles sedentary. Over the years, scientific inventions, although they have made our life more comfortable, have influenced us to become dependent upon them. As a result, we have developed a tendency for physical inactivity. For example, we tend to take a lift instead of climbing stairs, or drive a short distance instead of walking.

The benefits of exercise cannot be underestimated. By doing regular exercise we feel fit and feeling fit increases our physical and mental health, which ultimately improves our resistance to stress. According to Quick and Quick (1984) 'aerobically fit individuals' have been shown to have 'a better interplay between their activating, stress-response sympathetic nervous system and their relaxing restorative parasympathetic nervous system. This suggests that fit individuals may be less psychologically reactive in stressful situations'. Quick and Quick (1984) state that 'aerobic exercise is the only form of exercise which can predictably achieve cardio-respiratory fitness'. However, it is important to remember that vulnerability to coronary disease results from a multitude of factors, such as genetic endowment, diet and exercise. Genetic endowment cannot be reversed by doing exercise alone, but exercise could help the individual, who is at risk of coronary disease, to live a healthier quality of life.

11.1 Physical Benefits of Exercise

There are many positive effects on the body if we take regular exercise. Some of the most important ones are as follows:

- it improves cardiovascular functioning
- it reduces risk of heart disease
- it increases muscle tone and improves figure
- it reduces high blood pressure
- it increases physical strength
- it keeps the joints supple
- it reduces body weight
- it improves sleep patterns

11.2 Mental Benefits of Exercise

There are many mental benefits of doing regular exercise. Researchers suggest that exercise reduces reaction to psychosocial stressors (Crews and Landers, 1987) and others note that exercise can prevent or reduce depression (Morgan and Goldston, 1987). Other benefits include:

- improved mental functioning
- alertness and efficiency
- improved body image and self-esteem
- increased feelings of self-control
- independence, and self-sufficiency
- reduced levels of stress (Rice, 1992)

Nevertheless, the precise nature of psychological and physiological processes of exercise contributing to stress management is not clear (Matteson and Ivancevich, 1987). It is suggested that individuals should exercise 3 to 4 times a week and 30 to 40 minutes each time, to achieve aerobic improvement. The exercise you choose should fit into your lifestyle. To achieve aerobic fitness you do not have to engage yourself in extremely demanding exercise. There are several keep-fit, aerobic or yoga classes available to join. You can choose one that suits you and could try to include that in to your routine. Home-based treadmills and other exercise machines can be beneficial. Even a skipping rope could be used which is cheap and can be used anywhere.

Before embarking on an exercise programme one must take a few precautions. A thorough medical check up should be done if the individual is over 35 years of age. Overweight people should take extra precautions. It is important to remember to use warm-up and cool-down periods before and after exercise. To prevent relapse one has to try getting support from family and friends. Researchers suggest that spouse involvement is useful in weight loss programmes and may work in exercise programmes (Brownell *et al*., 1986). When there is a strong sense of group cohesiveness, group exercise can help adherence (Carron *et al*., 1988).

12. NUTRITION AND HEALTHY LIFESTYLE

Stress vulnerability increases with poor diet, (i.e. eating the wrong food or eating too much). Too much sugar in a diet depletes vitamins and minerals. Reduction of certain B vitamins (e.g., thiamine, niacin and B_{12}) can result in increased irritability and nervousness. It is suggested that

caffeine acts as a stimulant to the central nervous system (Boulenger *et al.*, 1987). Lane (1983) stated that caffeine stimulates the autonomic nervous system and decreases the threshold for stress reactions. When an individual consumes a large amount of caffeine he/she is more likely to interpret an event as stressful. Researchers suggest that caffeine is an anxiogenic substance that is dose related. When ingested at around 720 mg caffeine provokes anxiety (Boulenger *et al.*, 1987). It is believed that coffee or caffeine consumption may contribute to the development of CHD (LaCroix *et al.*, 1986) but the evidence still remains inconclusive (Grobbee *et al.*, 1990; LeGrady *et al.*, 1987; Tverdal *et al.*, 1990).

In comparison with Australia, the USA and other EC countries the UK has a relatively low consumption record of fruit and vegetables (excluding potatoes), pulses, meat and cheese (Department of Health, 1994). In addition, the UK has a comparatively high consumption record of potatoes and an approximately average consumption of cereals, sugar, fish, eggs, milk, butter and oils. The National Food Survey in the UK shows that over the last 50 years the proportion of food energy derived from carbohydrates has declined and there has been a corresponding increase in the proportion of energy derived from fat, in the years following the war (Department of Health, 1994).

From the mid 1950s to the early 1970s the total consumption of fats and oils remained steady, around 50g/day, but the figure has dropped to around 35g/day in 1992 (Department of Health, 1994). The total meat consumption increased in the mid 1950s but since then there has been a steady decline in consumption of lamb. Although these figures look appealing there has been a drop in consumption of fish (27g/day in 1950 to 20g/day in 1990, Department of Health, 1994). Consumption of fatty fish lowers cholesterol level and thus has a protective effect on CHD. Saturated fat consumption is very high in Western countries including the UK. In the diet, there are three main types of fat, saturated, mono-unsaturated and polyunsaturated. Saturated fat tends to activate the liver to produce more cholesterol, but polyunsaturated fat tends to lower the cholesterol in the blood. Mono-unsaturated fat neither increases nor decreases cholesterol. It is essential that one should cut down the saturated fat intake in the diet and try to eat polyunsaturated fat. Fatty fish, such as herring, mackerel and sardines are excellent sources of polyunsaturated fat. Eskimos have a low incidence of heart disease because they eat large amount of fish. This fact should encourage people to include more fish in their diet.

There are two different types of lipoproteins, high-density lipoprotein (HDL) (good cholesterol) and low-density lipoprotein (LDL) (bad cholesterol). HDL has a protective function against CHD whereas LDL tends to narrow the arteries by forming plaques in the arterial walls. It is

found that some individuals tend to have a genetic disposition to produce more lipoprotein (a), a newly discovered LDL (Hajjar *et al*., 1989). This lipoprotein does not respond to diet and makes individuals susceptible to heart attack. Individuals who are physically active and do regular exercise tend to carry more HDL whereas people with sedentary lifestyle tend to carry more LDL (Gutlin and Kessler, 1983).

Carbohydrates are essential for the brain to function efficiently and to provide fuel for physical activity. Additionally, it provides quick energy and gives the feeling of a full stomach, with fewer calories than protein and fat. On the other hand, excessive amounts of carbohydrate can produce a sedative-like effect related to brain chemistry and tryptophan (Lieberman *et al*., 1986). It is therefore, better to avoid a high carbohydrate meal during lunch time as it can lower mental alertness for almost 3 hours after eating (Rice, 1992).

Protein is the basic requirement for growth and repair. Antibodies and other components of the immune system are proteins. Therefore, protein plays a vital role in protecting against diseases (Gershoff, 1990). When we are under stress or suffer from illness, our bodies' demand for protein may increase by 100% (Rice, 1992). There is a popular myth that protein produces strength and meat is the best source of protein. But we acquire strength through exercise and carbohydrate plays a vital role in providing energy for exercise.

Most stress researchers appear to agree about the value of proper diet to maintain a healthy body and develop higher resistance to illness and stress. A proper diet may mean cutting down on fat intake (particularly saturated fat), increasing the amount of complex carbohydrate intake (to increase fibre intake) and eating more fruit and vegetables.

13. ESCAPE THROUGH SELF-MEDICATION

Some people use tranquillisers, alcohol and other drugs to cope with stress. Although they may be successful in the short term, these behaviours have a negative effect on health. The high prevalence of alcohol and drug abuse in the medical profession is well documented (see chapter 5). The medical profession in the UK has expressed their concern about drug dependency and alcoholism amongst doctors (Irvine, 1982; HMSO, 1975). Research evidence suggests that self-prescribing is associated with a gradual increase in drug dependency amongst doctors (Allibone *et al*., 1979, 1981). Sometimes this maladaptive coping effort may exacerbate this behaviour and these doctors become burnt out and kill themselves (Bailey, 1983; HMSO, 1978; Murray, 1978; Rose and Rosow, 1973).

Murray (1978) reviewed several studies on doctors receiving treatment for mental illness and found that drug addiction was extremely common. The inadequacy of medical education, regarding drug and alcohol abuse, has been criticised (BMA, 1992). Therefore it is important to educate doctors (and nurses) in drug and alcohol abuse during their training period which will enable them to recognise the symptoms of such abuse in their patients and would help them to explore their personal attitude towards drug use and its impact on their role as therapist. It is recommended by the Medical Ethics Committee of the BMA that doctors must not treat themselves or their immediate family. Improvements in the occupational health service could reduce self-medication and pharmacists should be aware while dispensing drugs to the individual doctor. The general practitioner should consult his/her own doctor for his or her families need of medical attention.

14. MANAGING TIME-RELATED STRESS

We shall describe time management in relation to work and to other aspects of life. General practitioners, practice managers, receptionists, practice nurses and other primary care professionals are aware of the need to manage time effectively.

Time management is 'efficient use of our resources, including time in such a way that we are effective in achieving important personal goals' (Ferner, 1980). Time management is important to the problem of stress for several reasons. When an individual uses time management techniques, the personal productivity could be improved. For example, he or she can spend time for social activities, doing exercise and/or pursuing other hobbies. It is frequently cited in the literature that a lack of time to pursue personal interests or social pursuits is one of the top stressors for doctors (Gabbard *et al*., 1987).

When time management becomes the ultimate goal itself, it may be damaging to health. For example, it reinforces type A behaviour pattern where the individual works harder and harder to achieve more and more in a limited time. But if time management is used to reschedule priorities and reveal inefficient work habits, it is helpful to rethink some of our attitudes toward time. 'The goal of effective time management is to find the harmony or balance in use of time that serves productive, wage-earning needs but still meets personal needs of caring, sharing, and growing' (Rice, 1992). Research has shown that individuals who have a high need for achievement feel annoyed when their watches stop running. These people feel anxious when they are not certain about the time and feel surprised how people manage without watches (Webber, 1972).

On the contrary some people like to put off their work until tomorrow, which should be done today. They are called procrastinators. Procrastination is a term, which comes from the Latin word 'tomorrow'. John Adair (1988) cites a case of a born procrastinator who achieved absolutely nothing. Someone who knew him wrote a summary:

'He slept beneath the moon,
He basked beneath the sun.
He lived a life of going-to-do,
And died with nothing done.'

A case study of a GP who was a procrastinator is given in box 7.5.

Box 7.5

Dr L was the senior partner in a group practice. At the end of the day he used to take a number of patients' records, in a carrier bag, to his home. First he would take it to the dining room wishing to work on them but never managed. Later he would take the bag to his bedroom hoping to work on them yet simply leave them there. The bag would return to the surgery the next morning, and would again be taken home in the evening. The volume would gradually increase. This would go on for several days before the practice manager points out to Dr L that an insurance company had telephoned several times enquiring about Joe Blogg's private medical report. Then Dr L would take that particular record out and deal with it. He wouldn't have dealt with it if he had not been reminded.

14.1 Strategies for Effective Time Management

Any time management plan should start with a personal inventory to examine how you managed your time in the past, in an objective manner. By doing this you can obtain knowledge of what needs to be changed. You should keep a time log to record how you are spending the time. You might be surprised to see how much time you are wasting. You probably think you know how you spend your time but this is not true. According to Drucker (1967) (one of the pioneers of time management): 'Don't depend on memory, it's treacherous'. Therefore it is worth keeping a time log. An example of a time log is given below. You could copy this or make one, which is suitable for you.

An example of a time log for a day:

Date:

Time		Activity
Start	Finish	

In the first column, marked time (start and finish), write down the time you start and finish something. In the activity column write down what you are doing. It is important to note that you must note your interruptions as well. Ideally, for a 24 hour period you could record your activities every 30/60 minutes depending on your preference and keep your time log for a week or two. You could invent your own shorthand to keep it simple. Then you could add together the time spent in each activity. You could try to group your time under several headings after keeping a time log for a week to search for a pattern (see an example of time log data below). You could then see how much time you spent on important activities and low priority jobs. Ask yourself whether this is how you wish to spend your time. You may discover opportunities for improvement.

An example of time log data:

Time spent	Activity	Aim to reduce or add time

We have seen in box 7.5 how a GP was accumulating the paperwork and deferring them. He could break the paperwork into smaller units and distribute them evenly for the week and do a little every day rather than piling up and finding no time for it.

'Are you spending time on the job which could be done to a satisfactory level by anybody else'? Then you could think of delegating these tasks. Delegation is discussed elsewhere. According to Davidson (1978) you must find out the reason of disliking the job and then possibly you could delegate the job to someone else, or you could break the job into smaller units so that it may be easier to finish.

Identifying goals and objectives in the short, medium or long term is an important criteria for time management.

14.2 Setting Goals

1. Set achievable and clear goals
2. Assign a priority to individual goals
3. Set target dates for completing the task involved to achieve the goals
4. Re-evaluate the goals periodically

There is a limit as to how far an individual can plan for the future. Once Winston Churchill said: "It is wise to look ahead but foolish to look further than you can see" (cited in Adair, 1988). Being organised on a day-to-day basis may be sufficient for the time being but not enough to aim for the future direction. You must be clear about your long-term (e.g. 1 year to 5 years) goals and objectives. Policies should be clear so that confusion and time wasting can be avoided. Also, policies should be reviewed, adjusted, and changed when necessary. It is important to make middle-term plans for example, every 4 months or every 6 months according to your preference. This could suit you for progress review purposes. In the short-term, for example, you could make a fresh list, every day of what you want to achieve, in your free time. It may be essential to prioritise your task by using numbers, letters or colours. For example, a number system might include: 1- Must be done today, 2 - Should be done today, 3 - Might be done today. Even if you cannot do the job in the third priority, you will have done the important jobs according to your priorities.

14.3 Learning to Say No

Some people find it hard to refuse other people's requests for jobs to be done. This causes stress because they lack assertion skills. Therefore you must learn to say no, with firmness. If you find it difficult to say no, you

could examine the reasons. Is it due to lack of assertiveness, or is it due to not knowing your own capabilities? In these circumstances you could consider taking an assertiveness training course. "Assertiveness is the art of getting your own needs and wants met without preventing others from getting theirs. It should not be confused with aggressiveness" (Flanders, 1994).

14.4 Interruptions

Interruption of any kind is one of the major factors of stress in general practice (Rout and Rout, 1993). Perhaps it is more damaging when working on a complex task, where larger chunks of time are required for the flow of thought. Dealing with interruptions can be a problem for any primary care professional. Rutherford (1978) suggested that every time you respond to drop-ins with a pleasant chat you give a silent licence by encouraging them to interrupt again. This can be prevented by telling the interrupter that you are in the middle of some important project, which needs to be finished. You give another time to the interrupter for a meeting. If the behaviour of the interrupter continues, you could ignore him/her until he/she gets the message.

For interruption you can make a time log to get some idea of the size of the interruption (see below). You could identify the people or events who are responsible for the interruptions and find solutions to correct the situations.

Example of an interruptions log:

Day/Date	Source of interruption	Time taken	Reason/Urgency

Telephone interruptions during surgery hours can be unpleasant, annoying and frustrating especially while the GP or practice nurse is deeply involved in consultation with the patients. This can be avoided by instructing the staff to advise the caller that the doctor is busy in the surgery and he/she should ring later after the surgery hours. In very urgent cases the call may be put on 'hold' until after the end of the consultation. The

GP/practice nurse may make him/herself available to receive telephone calls at a certain time of the day only (batch calls, both incoming and outgoing) ideally after the surgery. Patients should be informed about this policy through the practice leaflets and/or posters in the waiting room. For any other important calls, the caller must be informed that the doctor is in the middle of a consultation and he/she may leave his/her telephone number so that the doctor can return the call as soon as he/she is free. In group practices the working pattern for the doctors can be organised in such a manner that one of the partners be available to deal with telephone calls. However, the final policy needs to be tailored to the preferences of the doctors involved. Some personal action plans could be followed including some simple actions such as turning off the 'call waiting' function on the mobile phones and checking your e-mails less often.

14.5 Paperwork

Paperwork was one of the top five stressors for general practitioners (Rout and Rout, 1996). It is often recommended to handle each piece of paper only once and it is worth acquiring the habit. You can sort your papers daily according to priority (low, medium and high priority). Then you could concentrate first on the high priority pile of paper. You may not feel pressurised if you don't get time to handle the low priority paperwork.

This principle of selection applies to other reading materials. For example, if you want to keep up with important developments in the professional field, you could read summary or review journals. Then you could choose articles or books that contain detail information for developing your skills.

15. MANAGING TYPE A BEHAVIOUR

Type A behaviour pattern was discussed as a moderator of stress response and a type A questionnaire was presented in chapter 4 for you to find out the extent of your type A behaviour. If the primary care professionals feel that their score inclines towards type A, they could consider recommendations directed at managing type A behaviour pattern.

Type A behaviour modification programmes, with both CHD patients and healthy individuals, have shown significant reduction in serum cholesterol levels and blood pressure, lower frequencies of subsequent CHD, increased work productivity and improved family relationships (Rahe *et al.*, 1975; Chesney and Rosenman, 1980; Suinn, 1976). However, Friedman and

Rosenman (1974) suggest that type A behaviour should be managed rather than changed, to minimise the health risk associations involved.

Primary care professionals of type A behaviour may find the following suggestions helpful coping strategies. Friedman and Rosenman (1974) recommend a number of 'drills against hurry sickness', which they claim work for their type A patients. Some of their suggestions are considered.

1. Force yourself to listen to others. Drill: 'Begin in your vocational hours to listen quietly to the conversation of other people. Quit trying to finish their sentences. An even better sort of drill if you have been in the habit of hastening the other person's speech rhythms is to seek out a person who stutters and then deliberately remain tranquil'.
2. Think before saying something. Drill: '(a) Do I really have anything important to say? (b) Does anyone want to hear it? (c) Is this the time to say it? If the answer to any of these three questions is 'no', then remain quiet even if you find yourself biting your lips in frustration.'
3. Change your obsessional time directed behaviour. Drill: 'Whenever you catch yourself speeding up your car in order to get through a yellow light at an intersection, penalise yourself by immediately turning right at the next comer. Circle the block and approach the same corner and signal right again. After such penalisation you may find yourself racing a yellow light a second, but probably not a third time.
4. Carry out exercises to assess your type A behaviour. Drill: 'Perhaps one of the most important new habits you can establish is to review at least once a week the original causes of your present 'hurry sickness'. 'In other words, try to get to the source of your problems and current obsessions, to the reasons for your time-dominated behaviour. Is it a need to feel important? Is it designed to avoid some activity or person? Is it really essential to the success of a particular personal or organisational goal? In respect to this latter point, never forget when confronted by any task to ask yourself the following questions: (a) Will this matter have importance in five years from now? (b) Must I do this right now, or do I have enough time to think about the best way to accomplish it?'
5. Slow down. Drill: 'Tell yourself at least once a day that no enterprise ever failed because it was executed too slowly, too well. Ask yourself, are good judgement and correct decisions best formulated under unhurried circumstances or under deadline pressures?'
6. Widen your outside activities. Drill: 'Attempt to read books that demand not only your entire attention but also a certain amount of patience.
7. Avoid making unnecessary appointments and protect your time - learn to say 'no'. 'Try to never forget that if you fail to protect your allotment of time no one else will. (This is described elsewhere).

8. Stress-free breathing spaces. Drill: 'Take as many stress-free 'breathing spaces' during the course of an intensive working day as is possible. Learn to interrupt long or even short sessions of any type of activity that you know or suspect may induce tension and stress before it is finished.
9. Appreciate others. Drill: 'Begin to speak your thanks or appreciation to others when they have performed services for you. And do not do so, like so many hostile type A subjects, with merely a grunt of thanks.'

16. MAINTAINING A STRESS DIARY

It is useful to keep a diary to be able to identify precisely those individuals or related events that may be causing stress. You could maintain a stress diary for days, weeks or months, noting all activities. This will provide information about the type of incident or person or situation that causes the most difficulty. Additionally, you should record your response to stress, i.e. what you did and finally think in retrospect what you should have done. An awareness of this should help the primary care professionals to develop an action plan to minimise or eliminate the stressors. An example of a stress diary is given on the next page. At the end of the week/s you could review the incident and people involved which caused the most stress and then try to isolate particular events and specific people who consistently seen to be implicated in stressful work experiences. You could set aside some time to analyse specifically the sources of problem and find out alternative coping strategies suitable to deal with future problems. It may be difficult to change certain things in life but it is worth trying in terms of long-term benefit.

17. DEVELOPING A SENSE OF HUMOUR

The idea of developing a sense of humour in life, to combat stress, may sound sceptical, but Norman Cousins' (1979) true story shows how humour can have a powerful effect on our mind and body. He was crippled by an autoimmune disease where the chances of recovery were extremely poor. He took a constructive view and wanted to manage his own therapy. He left the hospital against doctor's advice and checked into a hotel. After watching comedy movies and reading humorous books (in the hotel) he recovered within a short time. He thought that his laughter contributed to his recovery. Although there was scepticism about Norman's claim at that time, researchers now believe that laughter can influence changes in our body

functioning which improve the circulation, digestion and reduce muscle tension.

Sample stress diary:

Day/date	Time	People involved	Type of situation	Feelings	What you did	What you should have done
Week 1						
Monday 21.1.02						
Tuesday 22.1.02						
Wednesday 23.1.02						
Thursday 24.1.02						
Friday 25.1.02						
Saturday 26.1.02						
Sunday 27.1.02						

Removing the sources of stress is the best solution to alleviate stress but there are several circumstances where it is impossible to change the situation. Therefore one has to learn to live with it. In the primary care setting there are some stressors for which no simple solutions can be found. In these circumstances if the primary care professionals can learn to relax physically (switching off from work) they are more likely to be able to live with the stress. However, besides an individual's efforts it is important that there are a number of initiatives that organisations can pursue. This will be discussed in the next chapter.

Chapter 8

STRESS MANAGEMENT: ORGANISATION-LEVEL STRATEGIES

In chapter seven, we discussed individual strategies of managing stress which we hope will help the primary care professionals deal with stress and strain realistically. Today, many organisations are recognising the advantages of the introduction of stress management into the workplace. Therefore, in this chapter, organisation-level stress management intervention programmes are discussed.

The organisation-level stress management programme involves focusing on specific job stressors, intended to reduce negative outcomes (Ivancevich and Matteson, 1987). These include programmes designed to reduce job stressors in the organisation and programmes which improve a person's fit with his or her job and work environment. A framework for organisational stress interventions, developed by Ivancevich and colleagues (1990), suggests three intervention points: 'changing the stress potential in a situation by reducing the intensity and number of stressors; helping individuals modify their perception or appraisal of potentially stressful situations; and helping individuals cope more effectively with their responses to stressful situations'.

In recent years, there has been an increase in employee health programmes in the USA in order to reduce the escalating cost of employee health care insurance and litigation. Today, in the UK, this trend is spreading slowly. In this context we shall concentrate on Employee Assistance Programmes (EAPs) first.

1. EMPLOYEE ASSISTANCE PROGRAMMES

Employee Assistance Programmes originated in the USA, and were later introduced in the UK. These were expanded during the mid-1980s and early 90s in many industrial sectors in Britain. EAP is defined as "a mechanism for making counselling and other forms of assistance available to a designated workforce on a systematic and uniform basis, and to recognised standards" [Employee Assistance Professionals Association (EAPA in the UK), 1994]. This is "a programme that provides direct service to an organisation's workers who are experiencing many types of problems in their personal or work lives" (Cunningham, 1994). The objectives of EAPs are to benefit both the employee and the employing organisation. However, provision of EAP in Britain is not formalised. There are many different EAP models. For example, 'internal' EAPs which are work site-based and 'external' EAPs based outside the workplace others can be a combination of both. In Britain external EAPs are more common than internal EAPs. Berridge, Cooper and Highly-Marchington (1997) provide the following points that influence their operation:

British EAPs:

- emphasise brief counselling and intervention
- tend to be 'broad-brush' in coverage of topics and employees' families
- mainly receive self-referrals rather than managerial referrals
- concentrate on the individual rather than the organisation
- are funded by employer

EAPs include stress management classes, personal counselling and classes on coping (Ivancevich *et al.*, 1990), career change counselling, job retraining, and support for families of stressed employees. Some other organisations are developing several services to preserve the enthusiasm of employees - for example health gyms, spas, exercise and child-care services.

In bigger organisations a nurse, counsellor or social worker is given responsibility for different aspects of employees well-being. In New York, a departmental store (Macey's) was introduced to this kind of programme in 1917 (Carty, 1990). 'Control Data Corporation' introduced the 'staywell' programme which includes behaviour, and life-style change programmes such as smoking, fitness, nutrition and weight control, hypertension and stress. Specific activities to change life-style and improve health were planned for each employee. In addition, a follow-up programme was introduced where the employees formed groups and the members of the group helped each other to sustain the change in their behaviour. The outcome of the wellness programme was most impressive. The outcomes included 50% reductions in sickness rates and absenteeism, increases in job

performance, improved attitude towards work, improved stamina and loss of weight (Hall and Goodale, 1986). Control Data explored the health care costs and found that there was a significant reduction in those which were associated with a reduction in cigarette smoking and reduction in hypertension levels. Another finding was that those who underwent exercise training had 30% fewer claims compared with the sedentary group.

One of the most popular methods in dealing with stress is physical fitness (Rosch and Pelletier, 1987). Pepsico Inc. at their headquarters at New York has introduced a wide range of physical fitness programmes for their employees. The corporate HQ is located in an attractive setting, providing a gym, sauna, whirlpool and massage facilities. The atmosphere encourages the employees to take up physical fitness. The New York Telephone Company saved $2.7 million in absence and treatment costs in a year by introducing this wellness programme (i.e. cardiovascular fitness) (see Sutherland and Cooper, 1990). It is reported by Falkenberg (1987) that the employees might be motivated to stay with their present company because of the attractiveness of the fitness programme facilities.

In the UK two health care insurance companies (BUPA and PPP) 'have promoted preventative measures - medical screening, stress management programmes, and occupational health advice - no doubt believing that a healthier work-force will mean fewer claims' (McKenna, 1994). The Marks and Spencer organisation, in London, have facilities such as a gym, doctors, nurses, dentists, physiotherapists, osteopaths and health administrators. The company's deputy head of health services claimed that the service reduces absenteeism, increases the efficiency of the workforce and is an example of the commitment of the organisation to its employees (McKenna, 1994).

GPs or practice managers could make a conscious effort to organise fitness training during lunch times or other non-work hours. Leisure activities provide relaxation and reduce the effect of work-stress. Regular breaks during working hours would give a chance to 're-charge the batteries' and help the practice staff to unwind. Practices unable to implement this idea, owing to limited space, can make arrangements with their local health clubs for using fitness programme facilities for their practice staff. Although these programmes address some important issues on stress management, they do not always directly deal with the organisational reform issues. We shall discuss these later in this chapter.

2. COUNSELLING

The Post Office has introduced stress counsellors in two main metropolitan regions. In addition to helping the individuals to cope with

stress in the workplace, they also identified the sources of stress in the workplace which may be causing problems. They carried out an evaluation of the effectiveness of the counselling simultaneously. Results, to assess the effect of the counselling on outcomes, showed that there was a significant difference between pre- and post-counselling measures on anxiety and depression (Cooper *et al.*, 1989). It is important that NHS management provides confidential support, for example, counselling, occupational health services and referral services. Colleagues may refer the doctor to the General Medical Council (GMC) when the doctor's practice is impaired due to health problems. The GMC then considers the case and the doctor receives expert medical supervision.

The services of the National Counselling service for sick doctors are open to all medical practitioners in the UK and calls are accepted from sick doctors, colleagues and spouses (Rawnsley, 1989). Clinical details and name of the doctor are not required. It is funded by the Government and managed by a small independent committee of management which provides a humane and constructive approach to the doctor whose competence to practice has been eroded. The advisor is usually a senior doctor from a different area of the country.

GPs need to receive positive support from their senior partner, but since seeking help may be interpreted as an admission of inadequacy, it may affect their career. There should be provisions for external counselling. In-house counselling may help, in certain circumstances, for all the primary care professionals. See box 8.1 and box 8.2 for how a practice counsellor helped a receptionist and a practice nurse in managing following stressful events.

Box 8.1

Mrs H was a receptionist in a group practice who always worked hard and enjoyed her work. There was an abrupt change in her marital life when her husband revealed that he had decided to leave her and live with another woman. Mrs H was devastated at the incident. She put on a brave face, pretending that she was able to cope and continued working. There was an obvious change in her behaviour. She was noticed to be withdrawn, weepy and unmindful. The practice manager arranged the practice counsellor to see Mrs H and after several sessions of counselling Mrs H was able to reconcile with the situation and coped with her job without any further problems.

Box 8.2

Mrs J was a practice nurse who had wide ranging experience in hospital. She was competent in her job. One day while taking an ECG of one of the patients, the patient got an electric shock, due to a fault in the machine. The incidence shook her confidence and she was not able to use any of the electrical equipment in the surgery. There was a gradual deterioration in her confidence, and she stayed off sick. The practice felt her absence and the practice manager contacted her to offer support. The practice counsellor helped her by doing several sessions. The outcome of counselling was a success, and Mrs J returned to work with confidence, and handled all electrical equipment without any problem.

The National Association for Staff Support (NASS) is a registered charity consisting of professionals coordinating and developing staff support resources for all health care staff. They do not provide an individual counselling service but aim to identify and promote good staff practices. The association has produced a number of reports on stress management within the health service and has contacts all over the country who provide help and advice on staff support services. The British Association for Counselling provides information on counselling services run by individual counsellors in different areas. However, it does not provide individual counselling. MIND (National Association for Mental Health) offers support for individuals and their families in mental health distress through information, advice and local services. In England and Wales there are over 200 local groups. Other sources of help in times of stress and other problems can be obtained from different sources (see appendix).

Many doctors do not have their own GP, and occupational health services within the NHS have been quoted as among the poorest in the UK (BMA, 1991). Therefore it is important that occupational health services should be upgraded and awareness should be raised for the need for such provision for all NHS staff.

3. SABBATICALS

Sabbaticals for employees will allow them to do things that they have an interest in which wouldn't otherwise be possible. In Sweden, after a certain period of work, the employees are allowed a sabbatical of up to a year. Although, in the UK, only a few GPs take sabbaticals, this system could extend to other primary care professionals.

4. AWAY DAYS

One of the ways to get away from work and relax is to have occasional trips with all the members of the organisation. It may be planned, either during the weekend or when the surgery is closed on half days. Perhaps, inclusion of spouses might enhance the flavour of social togetherness. These occasions provide a relaxed atmosphere, give everyone a chance to get to know each other, increase understanding and develop relationships.

5. STRESS MANAGEMENT COURSE

While there are various stress management courses available; the choice of selecting a course depends on the individual's preference, between residential/non residential courses or in-house stress management courses. This might help dealing with stress. There are also stress awareness packs available tailored for specific professions, which would help individuals to understand the problem (Rout and Rout, 2000).

6. MANAGING PRACTICE

Practices can play a vital role in stress management of members working in them. For example, they can adopt various types of change in their organisational structure and procedure, or alter the nature of jobs, to prevent or reduce stress among staff. This may not eliminate stress altogether but can reduce several work related stress in the practices.

6.1 Changes in Practice Structure and Function

Authority needs to be spread widely throughout the practice (decentralisation). It is important to give opportunities to employees to have a voice in changing procedures. The staff need to be encouraged to participate in decision making. Practice policies should be written, which reduce uncertainties and ambiguities that might cause stress, for example, spelling out duties and responsibilities of all the staff. If such policies need successful application then the staff should have knowledge about these. Often decisions are taken on policy matters in the practice meeting in the presence of GP partners and the outcome is not conveyed to the practice staff. However, if a decision has been taken on any new policy, or the older policy been modified, then it is appropriate that all staff are given a clear idea on these accounts. Unless the procedure is clearly explained to all the

staff, one may do the same job differently than the others, then this may create confusion for other members. For example, when filing laboratory reports to the patients' records, one secretary may file the recent most report to the front of the pile and the other to the back of the pile. A doctor who is used to looking at the front of the pile for the most recent report might think that the report is still awaited if it is filed at the back of the pile. He/she may have to make telephone call to the laboratory to enquire about the result. The time spent in this way could have been saved if the report was filed in the appropriate place.

6.2 Changes in the Nature of the Job

Changes to the nature of specific jobs could help to reduce job stress. Through job enlargement (effort to broaden the scope of the required job) and job rotation (lateral transfer that enables employees to work at different jobs) stress can be reduced. It is likely that a person doing a repetitive job might not remain enthusiastic to carry on working. Job rotation reduces boredom through diversifying the staffs' activities and increases motivation and satisfaction of the staff. The organisation gets indirect benefit because this gives the manager more flexibility in rescheduling the work and adapting to changes. The practice manager should make the jobs interesting and stimulating for the staff by giving them a variety of jobs. We have come across a receptionist, during our interviews, who was complaining about her job being repetitive and boring (see chapter 6). She was asked to do all the repeat prescriptions in the morning and filing the laboratory reports into patients records in the afternoon. In these cases, the practice manager could allocate different tasks to different employees or make jobs interesting by broadening their scope. An example is given in box 8.3 where job rotation was successful for practice staff. Also it is important to ensure a good person-job fit (P-E fit described in chapter 2) in any organisation.

Box 8.3

During our interview Mrs J, a practice manager in a group practice, said: "There was no practice manager in this practice before I joined. I noticed that some staff were doing the same job every day and I was surprised to see that during staff shortages these girls were not able to do anything else other than what they have been doing for months or years. I made them rotate through different tasks in the morning and evening. Now they are happy and feel confident and capable of doing all types of jobs in the surgery. I see no problems arising during staff shortage, as we are not dependant on a particular person for any specific job. The practice is very efficient now".

We have mentioned a doctor's practice with an appointment system which did not work properly The receptionists stayed behind after the closing time until the doctor finished the surgery. These receptionists were unhappy about the arrangement and the staff morale was low in that practice. When we interviewed the doctor we learnt that she was unhappy with the service she was getting from her staff, and the staff turnover was very high. In this context it is worth mentioning how GP practices could learn from industry.

In the USA, Maids International, a house cleaning service had high turnover rates (see Greenberg and Baron, 1993). They tried to improve the condition and to reduce the level of stress. They attempted to eliminate fatigue and boredom (which usually burns people out) by giving them training which reduced the amount of effort required to do various cleaning jobs. In addition, time was built up into the schedule for socialising. The result was promising in that the employees stayed longer in the job, i.e. twice the industry average. The above practice could reschedule the receptionists' jobs and provide them with break times to unwind and relax. Stress is caused by a lack of rewards and praise and more importantly not providing individuals with the autonomy to do their jobs as they would like. Once the staff know their jobs they should be given the freedom to handle them without interference and provision of intermittent reward should be considered.

7. MENTORING

Mentoring in general practice set up could be considered for new staff and new doctors. Mentoring is a work relationship between a senior and a junior colleague. The senior colleague through his skill and experience would be able to act as a counsellor and support the junior colleague. The mentor provides advice and guidance to the mentee on how to survive and advance their career in the organisation. Mentors act as a role model. Mentoring can be between the same sexes or between different sexes, although women may prefer women. It may be formal or informal. Formal mentoring has been introduced in companies such as British Telecom, British Petroleum, and IBM which are aimed at developing new recruits and helping their career development. Individuals in this system usually do not have a personal mentor but they gain access to a wide range of experiences, improved training and self-development. Informal mentoring is an arrangement between two individuals. Usually a senior colleague, either voluntarily, or after being approached by a junior colleague who needs advice and support, acts as a mentor. In general practice, an informal

mentoring system would benefit a trainee (mentor - trainer), new partner (mentor - senior partner) or new reception staff (mentor - senior receptionist or practice manager). A great deal of skill is required to be a mentor. The following list shows the qualities of an effective mentor cited by Flanders (1994):

An effective mentor:

- is a good listener
- understands the difference between counselling and advising
- is able to quickly establish rapport with their mentee
- respects and understands their mentee
- acts as a sounding board, allowing their mentee to think out loud
- guides the mentee to find solutions for themselves, rather than telling them what they should do
- has the knowledge, experience and contacts to which their mentee needs access
- is able to influence others who can be of help to their mentee
- understands the mentee's job and the culture and structure of their company/department
- will not feel threatened by their mentee
- can think through situations and analyse them dispassionately
- is willing/able to give the time and commitment needed
- truly cares about their mentee as a person but avoids getting over-involved, emotionally, in their situation
- commands respect and is totally trustworthy
- is perceptive, patient and enthusiastic
- is willing and able to speak the truth, but in a constructive, not destructive, way
- is able to understand and relate to the mentee's personality, back-ground and lifestyle
- provides moral support and encouragement, constructive criticism and advice, and practical help.

(Source: Flanders (1994) Breakthrough, copyright Paul Chapman Publishing Ltd)

8. COMMUNICATION

We found from our studies (chapter 6) that lack of communication was one of the important stressors for all primary care professionals. This is not an unusual finding. As Charles Handy says, “ask any organisation what its

chief problem is. More often than not will reply communication." It is therefore necessary to create an organisational environment that encourages openness, communication and trust (Cooper, Rout and Faragher, 1989; Cooper and Marshall, 1978).

It is important to distinguish between organisational communication and interpersonal communication. According to Carlisle (1982):

> "Interpersonal communication is face-to-face. It is a person-to-person exchange of information that conveys the meaning. Organisational communication is the deliberate establishment and use of a system to transmit information conveying meaning to large numbers of people both within and outside the organisation".

Organisational communication is not all the communication that takes place within the organisation, rather the communication which is established deliberately within and outside its environment. Effective communication is essential for clear understanding and therefore practices must have an efficient system of passing messages within and outside the practice to all members concerned. Practice managers should take the initiative in devising different systems of communication until the most successful method is established.

In order to communicate with others the following methods, could be used either singly, or in various combinations.

- Short memos
- Newsletters
- Notice board
- Frequent informal lunch time meetings
- Face to face communication with individual members
- Telephone
- Electronic mail (E-mail)

Communication is most effective when it uses multiple channels, such as both oral and written messages. Oral messages have the benefit of a two-way communication whereas written messages (e.g. notes, memos) can take too long to get a reply. Two-way communication (eg. face-to-face, telephone) are more often used in organisations than one-way. The most effective way of communication may be an oral message followed up by a written one. Box 8.4 shows how communication difficulties can cause rifts amongst members of the organisation. This can be improved by several methods, eg. team briefing, and the expectations approach, which is explained below.

Box 8.4

This group practice of five doctors, all working in harmony, is a fundholding practice, in a purpose built medical centre. The practice is fully computerised and had recently been upgraded with new hardware. One day, one of the partners (Dr J), during out of office hours, worked on the practice manager's computer in her absence. The next day, the practice manager found that her computer was not working properly. She learnt that Dr J had handled the computer the previous day. She thought that Dr J had fiddled with the programme and messed up the new system. She reported this to the senior partner and made an issue about this matter. But, much to her embarrassment it was found nothing had gone wrong and she had forgotten the key commands for handling the programme. Dr J was not happy about the practice manager going behind his back and making an issue out of matters which were totally due to her own ignorance. The practice manager could have asked him first before taking the issue to the senior partner.

8.1 Improving Communication

8.1.1 Team Briefing

'Team briefing' methods could be used to improve communication in general practice. This method was pioneered by the Industrial Society which involves face-to-face communication in a group setting within an organisation. The leader of the group conveys information to the members in the group and the members are encouraged to ask questions. Team briefing usually starts at the top level of an organisation and finishes at the 'shopfloor'. In a typical group practice, the practice manager usually attends the meeting with the doctors. She should pass the messages on to secretaries, receptionists, nurses and other staff. The success of team briefing totally depends on the skill of the practice manager. Therefore it is important that she/he is properly trained.

8.1.2 'Expectations Approach'

At Durham University, research was carried out to audit the quality of communication among managers in organisations (Machin, 1980, see McKenna, 1994). This technique is known as the 'expectations approach' and this could be applied to a general practice setting.

'For a communication auditing system to be useful, an effective audit is required of what *Dr A* says he/she wants from *practice manager B,* and what *practice manager B* thinks that *Dr A* wants from him or her' (McKenna,

1994). For example, a GP whose communication has to be audited, goes through the following procedure:

- The GP writes down the expectation that he/she holds for the practice manager (identifying the things the practice manager is expected to do).
- The GP then writes down the expectations that he/she perceives that the practice manager has of him/her (identifying the things the practice manager expects him/her to do). This information can be analysed on a computer and can identify where communication channels have broken down.

In summary, GPs need to ensure that a two-way communication exists between them and the staff. Communication is a distinct feature of a group practice, useful for promoting individual growth. The expertise of each group of employees can be enhanced by the exchange of ideas, which can benefit the GPs, receptionists, practice managers, nurses and other professionals working in the primary care setting. Being in contact with those who take decisions may give the staff a sense of control over their work, no matter how little this may be. Doctors may feel that it is easier for them to get their messages through to their secretaries and receptionists rather than to the practice manager but this may be interpreted by the practice manager as undermining her position and doctors ignoring him/her.

Michael Argyle argues that people can acquire social skills, like any other motor skills, such as playing tennis (Argyle, 1972). Practising with appropriate techniques will improve the game. Likewise, one can improve communication skills with appropriate training.

8.1.3 Communication with Patients

Telephone systems in each practice need to be considered to match the demand of the patients. Unless, there is an adequate number of lines available for patients to ring through to the surgery, there are likely to be problems with making appointments, giving advice, and receiving messages, as well as inadequacies in dealing with emergencies. One must realise the degree of frustration among patients who make several attempts to contact the surgery but find the line to be constantly engaged. This problem may be overcome by installing a private automatic branch exchange (PABX) with an adequate number of lines and the option to expand if and when required. Figure 8.1 shows how a receptionist could handle telephone calls from patients. A notice board in the waiting room is helpful to put up posters and messages to communicate with the patients. Leaflets on health matters and practice policies can be left in the waiting room, making patients aware of relevant matters.

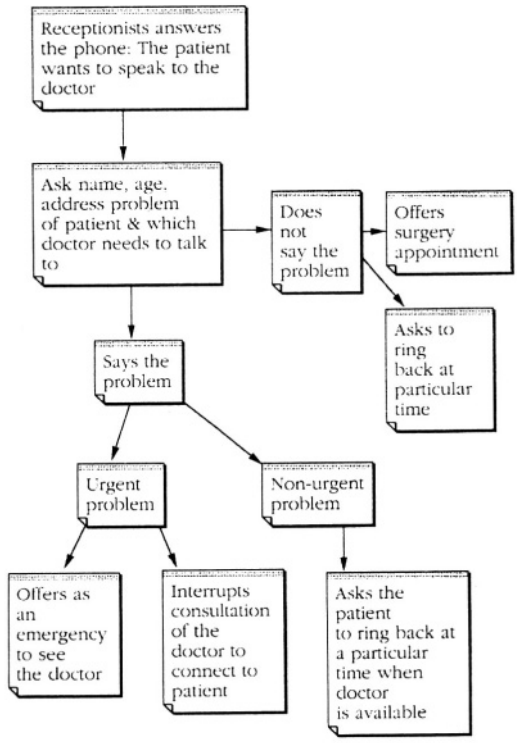

Figure 8.1. Flowchart to show receptionist's telephone handling

While working in a group or a team, problems experienced by one member may spread to others at some stage. Therefore, it is important for doctors/practice managers/practice staff, and practice nurses to communicate effectively. All members may benefit if the problem is known to everyone, so that they can take necessary steps to avoid stressful situations or deal with them appropriately. Box 8.5 and box 8.6 illustrate examples of communication difficulty in a group practice.

Box 8.5

During our interview a practice manager stated: "We had a patient in the practice who used to be very demanding. He knew our practice policy where we need two days notice to prepare repeat prescriptions. But he would come to the reception desk and ask for a prescription, then and there, without delay. Receptionists repeatedly tried to explain to him that

it was not possible for them to do so. The patient would suddenly lose his temper and become aggressive. Receptionists kept coming to me to solve the problem. This happened every month so I had to intervene and interviewed the patient. He said that Dr X, the previous time, had written a prescription for him in no time at all. It was found that one of the doctors in the practice had given him the idea that he could come at any time for his prescription. In the next practice meeting it was pointed out to Dr X by his partners that his activities were inconsistent with practice policy. As a result, the receptionists were getting the brunt of the patient's aggression. Dr X conceded to the allegation but stressed that this policy was established while he was on holiday and has not been notified. However, he agreed to explain to the patient the principles of the practice that the receptionist was simply carrying out her duty as advised. The problem did not occur again after he did that. It is clear from this example that lack of communication can cause stress among various members in the organisation.

Box 8.6

During our interview a receptionist said: "In this practice all doctors see patients on appointments only. One of the doctors (Dr D) always arrives late before starting his surgery. Also he takes longer than the allocated time to see patients. As a result, half of his patients will still be there in the waiting room when all other doctors' patients will have been seen and gone. Dr D's patients keep coming back to the reception window asking about their turn to see the doctor. I assure them that Dr D is running a bit late and it won't be too long before they are seen. There are problems for other doctors as well. Patients waiting for a long time in the waiting room to see Dr D sometimes comes back to me requesting to see someone else (one of the other doctors in the practice) because they have other things to do. Thus, other doctors see these patients in addition to their own list. These doctors think that I am the one who is increasing their workload by sending them extra patients. I feel bad about it". After a few months the receptionist complained to the practice manager that she was unhappy due to the pressure at the reception desk and she was unable to leave the office on time. The matter was discussed in the practice meeting. Dr D agreed to start his surgery early and try to finish his surgery on reasonable time. His patients were given longer appointment and the situation is now vastly improved.

8.1.4 Patient Participation

Patients' expectations have increased many times over, and for some, their 'wants' are more than their 'needs'. It is quite possible that the patients' charter may have empowered patients with excessive domination to the detriment of the doctor-patient relationship. GPs and the practice manager/s could consider initiating patient participation groups where the patients learn how to share responsibility on health matters. They could become acquainted with the surgery work pattern, workload and job demands. The expectations of patients could be made more realistic by increasing their understanding through discussion between doctors, staff and patients. The patient participation group movement has been in existence for several years in some areas of England and are perceived to be important; others need to be encouraged and helped. The degree to which group members are representative of patients as a whole is questionable. Nevertheless, some authors have suggested how to form a genuinely representative patient participation group (Agas et *al.*, 1991). This may take time to implement.

9. DELEGATION

Delegation involves the passing on of authority and responsibility to various levels throughout the organisation. Delegation is the systematic allocation of duties and responsibilities (Mullins, 1985). "Delegation is part of team building and also a part of a person's development as they take on new tasks and learn new skills and responsibilities" (Atkinson, 1993). Delegation is commonly interpreted as movement down an organisation. Duties and responsibilities can be delegated to seniors - for example, in general practice, when a junior partner and/or a trainee is absent through illness or holiday, the senior partner and/or the trainer can take over the work. However it is important that the general practitioner and the practice manager understand the process of delegation and how best to implement it to improve practice effectiveness.

9.1 A Systematic Approach to Delegation

According to Mullins (1985) delegation must be planned properly and approached systematically. Mullins suggested 6 stages in a planned and systematic approach to delegation. These can be applied in general practice. They are as follows: The first stage is "the clarification of objectives" of a practice. "There must be a clear chain of command with effective communication and coordination between various levels of authority within the organisation structure" (e.g., GP, practice manager, receptionist, etc.). In

the second stage the practice manager must be clear about the "opportunities and limitations" of her own job. The staff must understand the nature of their jobs after full discussion. In the third stage it is essential to make sure that the staff "accept the extent of, and restrictions on, the authority and responsibility delegated to them". In the fourth stage the staff "should be properly briefed, given guidance and any necessary training". In the fifth stage, "it is necessary to agree on time limits for delegation". In the sixth stage, the staff "should then be left alone to get on with the job". "A planned and systematic approach means the effective delegation can be achieved without loss of control" (Mullins, 1985).

Many doctors do not always take maximum advantage of the skills of secretaries, receptionists, practice managers and nurses (Drury 1982). However, doctors need to be trained, whilst at medical school, and when practising full time, to delegate. Successful delegation benefits both the GP and the staff, and enables them both to play their respective roles in improving the quality of care and practice performance. It is important for the GP to consider the statement: "Delegation is a great motivator, it enriches jobs, improves performance and raises morale" (Adair, 1988).

It is important to realise that delegation gives you more time to do higher priority tasks. For example, delegation of appropriate paperwork to practice staff could allow the GP to spend more time in consultation with patients. Delegation can motivate staff and develop a sense of being valued by the practice, if they are delegated interesting jobs. Practice managers were unhappy with their GPs because they were not trusted by them (Rout, 1996). Therefore it is important for the GPs to trust and have confidence in their practice manager and be able to delegate more tasks, especially routine and administrative parts of the job, to them. On the other hand, the GP should not delegate all the administrative jobs and concentrate solely on patient consultation.

9.2 Practice Nurse

Now GPs are increasingly employing their own practice nurses. Reedy *et al.* (1976) found that 3100 nurses were employed as practice nurses in 1974. On the basis of an international literature survey, Weisz (1972) found the following tasks to be the most commonly delegated: refractory, visual field test, measurement of intraoccular tension, hearing tests, otoscopy, gynaecological cytology, history taking, complete physical examination, intravenous injection, episiotomy, suturing of a perineal rupture, vacuum extraction, defibrillation, introduction of gastric tube, suturing of laceration, operation for entropion, operation for cataract, intravenous infusion, application of plaster casts, insertion of IUCDs, condensing and carving

amalgram, restorations, closed-chest cardiac massage and mouth-to-mouth breathing (see Bowling, 1981). Many of these procedures are not a common practice in the primary care in the UK. Reedy (1976), on the basis of a literature survey in the UK, recorded a list of tasks performed by practice nurses which shows that UK practice nurses perform much simpler types of procedure than those listed above.

The practice nurse is a valuable asset to the GP since she/he can take the bulk of clinical responsibility by screening, giving advice for health matters and surveillance of various chronic disorders, (e.g., asthma, diabetes, hypertension). She/he can also play a vital role in prevention of illness, immunisation and health screening. It is important for the GP and the practice nurse to trust each other and to be able to work together in harmony.

There are many tasks the nurse can perhaps perform better than the GP, but some GPs feel threatened that delegating more of their clinical workload might make the practice nurse take over much of their work. Anecdotal evidence suggests that some GPs are worried about delegating more and more to the nurses since it might be interpreted by the Government that nurses can deal with a large proportion of clinical work in general practice. Then some of the clinical responsibilities may be taken away from GPs, which would affect their integrity, status and income. However, by delegating work to the practice nurse would not necessarily mean less work for the GP, as there is always so much to be done for delivering primary care to their patients. Also, in Britain, doctors tend to be conservative. They complain of having too much workload but they are reluctant to delegate.

It is important for the GP to consider how the practice would like to achieve its objectives through the practice nurse (for example, management of diabetes, asthma, and other chronic disorders). The nurse should be encouraged to obtain training in specific areas in which she/he wishes to get involved. The role of the practice nurse will vary from practice to practice. But, all practice nurses need to be generalists. She/he should have basic training in family planning, counselling and interviewing techniques. Unlike the hospital setting the practice nurse needs to work with the GP as a colleague rather than a subordinate waiting to take instructions from the doctor. Our findings suggest that there is overlap between the role of the practice nurse and district nurse. Therefore, it is essential to avoid any role conflict by defining the role of each member and the boundaries.

9.3 Counsellor

Our interviews with GPs (Rout and Rout, 1993) showed that a large proportion of consultations were for non-medical (psycho-social) problems which were time consuming and GPs did not enjoy dealing with due to time

pressure. These psychosocial problems can dealt with by a counsellor. A study in Bristol found that only 53% of patients attended the surgery for purely physical problems, 27% with psychiatric or psychological problems, 16% with social problems and 4% attended for trivial reasons (Hudson, 1988). This raises the question of how GPs cope, when nearly half of their patients attend the surgery with underlying social and psychological problems. Some GPs say the answer lies in the prescription pad and the use of psychotropic drugs. Also some GPs feel that they are inadequately trained to cope with the non-medical problems encountered within general practice. As a GP expressed:

> "I let the patient talk for a few minutes when I realise that their problem is not physical, then I become aware that time is getting on, so I start writing a prescription. Patients always know that a prescription is the termination of a consultation and automatically stop talking" (Hudson, 1988).

GPs need to realise that it is not always easy to counsel a patient within a 5-10 minutes appointment and should recognise substantial advantages of using a qualified counsellor.

10. PRIMARY HEALTH CARE TEAM

Members of primary health care team share a common goal or purpose. This idea of a shared goal or 'shared vision' is the main component of any team.

10.1 Problems for Team Working

One of the obstacles in successful team work in general practice is lack of commitment by the primary care professionals. Often the primary care team seems to be a collection of individuals rather than a team. This may be due to the appointment of each member of the team by different employers. For example, district nurses, CPNs and health visitors are employed by the Community Trust. On the other hand, practice managers, practice nurses, secretaries and receptionists are employed by the GPs. However, the aim of each member of the team is to achieve goals by rendering services defined to the patient population. Therefore, it is essential to have a close collaboration, cooperation and communication amongst all the members involved.

There are some GPs who think district nurses, health visitors, and practice nurses are hand maidens and ready to take orders. This attitude is counterproductive for achieving any goals in a team. The district nurses, health visitors and practice nurses are fully trained professionals. Therefore, it is important for GPs and nurses to understand each other's role. Another important problem to 'team working' is poor practice organisation. The practice manager must take responsibility for organising regular practice meetings in an effective way. Regular informal meetings can enhance the functioning of the team through friendly relationships. Good communication is an essential component of team relationship. This is also discussed elsewhere.

10.2 How the Team Functions Well?

"Successful team work needs more than an agreement to work together. Conscious effort towards preparation for team work need to be made, both at individual team level, and during professional training" (DHSS, 1981). The most valuable feature for a good team is frankness, which can be achieved by getting to know each other socially as well as professionally. We mentioned 'away days' earlier. Training or learning in a group ('multi disciplinary training') will help to understand each other's jobs. Therefore, practices can arrange their own training courses or they can attend outside training courses, for example, arranged by the Health Authorities.

Rubin *et al*. (1975) developed a 'do it yourself' programme for helping teams to work well. Another approach is to ask an organisational development consultant to help in initiating the programme. This experiment was tried in the Oxford region and was successful (Pritchard *et al*., 1984).

Rubin and his colleagues recommend to look at the team process in a particular order as shown below (Rubin *et al*., 1975).

1. Goals	What are we here for? What is the task?
2. Roles	Who does what?
3. Procedures	How do we go about it?
4. Interpersonal Relationships	How do we go on together?

"By starting at the top of the list, teams got their working relationship going and rarely reached the last item - interpersonal relationships - because they had already sorted themselves out. But if they started with interpersonal problems, they never reached the task!" (Pritchard *et al*., 1984).

11. PROBLEMS IN GROUP PRACTICES

11.1 Partnership

Our study on GPs found conflict between partners was one of the stressors for doctors (Rout and Rout, 1993). There are many examples where partnerships break up due to interpersonal problems, unequal distribution of workload, and inappropriate profit sharing. In group practices, some senior general practitioners have not been able to change their attitudes towards the general practice set up and work pattern over the years. As a result, the younger GPs feel that their skills remain under utilised and innovative ideas get rejected or halted by their senior partner. Consequently, tension builds up in the organisation.

The newly qualified doctor wishing to join a partnership must make in-depth enquiries about the practice: partner's attitude, religious views, flexibility to accept change, partnership agreement and practice policy. There needs to be a practice policy for the partners to avoid disagreements. There should be opportunities for all partners to debate all aspects of practice matters. e.g., finance, staff organisation, working arrangements. Therefore, the partners should meet regularly. It is important to communicate adequately within the practice. This is discussed elsewhere in this chapter. Some individual members in a group practice may experience their autonomy restricted whereas others might take advantage of the group and avoid sharing responsibility.

11.1.1 Group Decision Making

GPs are advised to balance their budget by prioritising the needs of the patient. Although this gives flexibility for doctors to decide where they should spend the money, there are times when painful decisions may have to be taken which might leave some patients dissatisfied. In a group practice an individual doctor may find it stressful to compromise his convictions with the views of his partners. An example can be seen in box 8.7.

Box 8.7

Mrs V has a child of three years from her previous marriage. She is remarried to Mr V, who had a relationship with someone but had no children. Mr and Mrs V wanted to have a family but unfortunately Mrs V was unable to conceive. Investigations showed that Mrs V had blocked fallopian tubes which prevented her getting pregnant in the natural way. So the only possible way of pregnancy was by *in vitro* fertilization (IVF).

There is a long waiting list for these procedures in the NHS. However, the couple would not be given priority as Mrs V already had a child. The procedure is expensive for private treatment. Mrs V was accepted for IVF in one of the hospitals for a nominal charge, with the condition that she will have to obtain her fertility drugs from her GP or has to buy them from her own money. She approached her GP (Dr W) for fertility drugs. Dr W was very sympathetic to her but was unable to commit to prescribing these expensive drugs without discussing the matter with his partners. In the doctors' practice meeting this subject was discussed at length. Although the doctors were sympathetic to Mrs V's problems, they decided not to prescribe fertility drugs on the grounds of their high cost and the fact that there was a child in the family. This money could be well spent on other health matters for the benefit of several other patients. Mrs V and Dr W were not very pleased about this decision but Dr W had to follow the group's decision.

11.2 Social Loafing

Individuals tend to put less effort in while working in a group than they would if they were working alone and the larger the group, the less effort each individual exerts. Latané *et al*. (1979) found the social loafing phenomenon to be widespread in both laboratory and field settings. Social loafing tended to diminish if the participants were made aware that they were being assessed. The example in box 8.8 below shows how a doctor in a group practice tried to avoid taking his share of workload but quickly reversed the trend after realising that he was being watched.

Box 8.8

Dr H is the senior partner in a group practice of six doctors on equal share of profit. In this practice, the receptionists record all the requests made for home visits in a diary (visiting book). Doctors, after the end of the morning surgery, examine the visiting list and put their initials against the visits they take. Ideally all partners should have equal number of visits. Recently Dr H had been taking only one or two visits, irrespective of the total number of visits in the book. This was too obvious to his colleagues. One day, one of his colleagues mentioned to him that he is doing an audit on home visits. It was noticed from that day that the visiting book had Dr H's initial against a number of visits. Sometimes he visited more patients than his share.

12. WORKPLACE VIOLENCE

Workplace violence is found to be one of the stressors for doctors, practice nurses, district nurses, receptionists, and CPNs (Rout and Rout, 1996). There have been several incidences of violent actions against GPs, including stabbing and murder in the UK. There is some evidence that the threat of violence is a common source of worry among general practitioners (Myerson, 1990, 1991; Black *et al*., 1990). Hobb (1994) carried out a survey of all GPs in the West Midlands Health Authority region, using a questionnaire. Out of 1093 respondents 63% had suffered some degree of aggression in the previous 12 months (while consulting in the surgeries, doing evening and night calls). A survey by Williams (1994) in West Glamorgan found that 9 out of 10 doctors experienced at least one incidence of verbal abuse in the past 12 months and that single handed GPs were more vulnerable to attack. Surgery receptionists are the first contact with the patients, both face to face and over the telephone. This makes them prone to verbal and physical abuse. Practice nurses, health visitors and district nurses have to visit patients at their homes where dissatisfied patients may create an unpleasant atmosphere including violence. General practitioners are particularly vulnerable to attack from drug addicts, dissatisfied patients and their relatives, vandals and thieves. We suggest that the following steps need to be taken in order to keep the work environment pleasant and reduce violence in the work place.

12.1 Physical Structure of the Surgery

There should be easy access to the surgery with adequate parking facilities. There is some evidence to suggest that crowding may increase aggression. Aggression can be reduced in practice premises through careful design (Health and Safety Executive, 1988). The waiting room needs to have adequate sitting arrangements so that patients can sit comfortably without feeling crammed, while waiting to be seen. The provision of a play area for children, with constructive toys, might keep them occupied and stop them running around. It is a good idea to provide some reading material to reduce people's boredom. Playing music through a PA system or even running educational video programmes might be considered as entertaining. Some modern practices have their reception counters as open plan i.e. without a significant barrier between the staff and patients. This arrangement might help the communication to be easier but makes the receptionists vulnerable to abuse. A well planned barrier at the reception window with adequate visibility and a good system of communication would give the staff a sense of security. In addition, other environmental conditions could be

controlled, for example, high levels of noise and exposure to a variety of air pollution (e.g. odours, cigarette smoke). These may produce emotional arousal and increase the likelihood of aggression.

The receptionists need to have a pleasant personality with a good working knowledge to be able to provide any information required by the patients. Doctors consulting with an appointment system need to keep to the time schedule, although it is not always possible to do so due to variability in the type of problems they deal with. It is unavoidable that some patients will take more time than others, and often multiple problem solving will require longer consultation than the allocated time. If one or two patients take up more time it is obvious that the subsequent ones will be delayed. This may cause frustration, annoyance or even anger. It is argued that frustration is most likely to produce aggression when it is relatively intense (e.g. when a patient is in pain and told that she/he can be seen after an hour or so). The practice manager or receptionist need to inform and explain the system or apologise about the circumstances to the patient that the doctor will be late so that they don't lose patience. Therefore the receptionists' training should include interpersonal and communication skills; training in self-defence would be an advantage. These training programmes are available in the USA and UK. It is essential to provide training programmes for the early recognition of aggression. This is already available for social workers (Brown, 1986). A night visit service can be organised with escorts for doctors for out-of -hours arrangements (Hobbs, 1990). Although these do not provide a total solution they do facilitate risk management. Preventive measures like panic attack buttons, personal alarms may be made a standard arrangement in areas of high vulnerability. However, it is easier to prevent aggression than to stop it, once the individual has passed his/her threshold for violence. Therefore it is essential for the reception staff, the doctor and others to be aware of verbal and non-verbal cues given by patients so that the situation could be diffused by early intervention. The staff and doctors usually know which patients and families are hostile and therefore could take precautions.

13. MANAGING CHANGE

We have been through changes at various stages of our lives. Some of them have been experienced suddenly and others through a slow process. There has been a change in the structure of the workforce, in the 1990s, due to increasing number of women entering into employment. Recent development in information technology has undoubtedly created pressure on organisations, compelling them to respond to the changes in order to survive.

Changes ultimately affect the way organisations are organised and managed. Organisational changes are likely to happen due to influence of self imposed change or environmental (outside the organisation) factors. The 1990 GP contract which was imposed through legislation is a typical example of an environmental factor (chapter 1). The GPs are unhappy with the 1990 contractual changes mainly because of the way the changes were introduced. The pace and extent of change was seen to be a major source of stress for the GPs. Throughout interviews, and in comments made on the questionnaire, GPs expressed concern that they are expected to be experts in management skills, but with the accelerated change they often felt uncertain about what was going on.

The job demand control model proposed by Karasek (1979) indicates that workers exposed to high levels of demand are more able to cope with the sources of stress if they perceive they have a high degree of decision making latitude and autonomy in the job. The doctors reported that they no longer felt in control of events that affected their working practice because there was no consultation before the changes were made (Rout and Rout, 1993). This highlights the importance for GPs to have control over their work environment, status in their jobs and recognition from others for work well done. However, one must accept that change is not a new phenomenon. Change occurs all the time but today they are more profound, and occurring more often at a more accelerated rate than in the past. It can stimulate organisations to explore alternative ways to meet the challenge.

13.1 Resistance to Change

Resistance to change may be due to, the level of individuals working in the organisation or at the organisational level. Individuals may resist change due to established habit, economic factors or security. Organisations may object to change on the grounds of loss of authority in decision making and redistribution of power. Introduction of participation in decision making can be seen as a threat to the power of general practitioners. Individuals may accept change but groups may not want to change their behaviour because of the norm.

13.2 Controlling Resistance to Change

There are six approaches suggested by Kotter and Schlesnger (1979) in dealing with resistance to change. Resistance to change can be reduced through communication, support, participation, negotiation, cooperation and coercion. For primary care only the first four i.e. communication, support, participation and negotiation, are applicable in dealing with resistance to

change. Communication is important because the logic of change can be conveyed to staff and this might reduce the resistance to change. Different support systems - for example, counselling and training - can be used to reduce resistance to change particularly where anxiety and fear are high among staff. Participation is the process whereby there is free discussion among group members so that a consensus view will emerge. When members of the group contribute to the decision making process it is unlikely that they will resist the outcome of a decision. Participating staff would be committed to implementing change. When staff perceive that they will lose a substantial advantage as a consequence of change, they resist it. A negotiation process could be used in order to implement the change.

Coch and French (1984) cite a classic study in participative change. At the Harwood Manufacturing Co. plant, an organisational change took place automatically. The decision was made by the management and the message was conveyed to the employees. Then the changes were implemented. Employees continued to resist the changes. A management consultant was hired by the company who used three different methods for three groups for the next change. The change was introduced in the usual manner (automatically) in the first group. In the second group, the change was initiated by employee participation through elected representatives. There was a full participation in the third group. The data was gathered for over a forty-day period and it was found that the first group was resistant to change as previously i.e. grievances and absenteeism increased and 17% employees left the job. On the other hand in the full and representative participation groups there was no absenteeism, no quittings and only one grievance. On the whole, participation was positively related to productivity.

Resistance to change can be reduced when an environment of trust and shared commitment is encouraged. It is essential to make other primary care professionals involved in making decisions which affect them as owners of the problem and the potential solution is vital. It can be suggested that new and innovative ideas should be thoroughly tested and objectively validated before being imposed. In order to successfully implement change, there needs to be adequate backing in terms of resources to ensure its smooth running and changeover.

13.3 Planning Organisational Change

According to Lewin (1951) successful change in organisations should follow three steps: 'unfreezing' the status quo, 'changing' or moving to a new state, and 'refreezing' the new change to make it permanent. In the 'unfreezing' step it is essential for the employees to accept the need for change. In the 'changing' step there is movement from the old situation to a new situation. In the 'refreezing' step change becomes part of the culture

once it is absorbed. One has to understand the stages through which the individual progresses to achieve change because it is useful for bringing about desired change in practice. The stages of managing change and their relationship with performance are described by Cranwell-ward (1987) in six steps.

1. Freezing: There is an initial period of shock following the change and the work performance is reduced.
2. Denial of change: Frequently people deny that any change has occurred. This is partly to protect themselves from fear of uncertainties and to help them cope with the situation.
3. Incompetence: The performance is poor and is unlikely to improve unless the individual adapts to the change.
4. Letting go of the past: During this stage the individual comes to terms with the change and becomes more positive. This is the 'unfreezing' stage.
5. Experimenting: Performance starts to improve as the individual tries out the new behaviour.
6. Refreezing: The individual accepts the new ways of thinking. This is the consolidation stage

It is important to note that diagnosis of the goals of change is the first step in organisation development. Following this the nature of the change should be planned. It is desirable for members of the organisation to participate in the change process. Like many other organisations primary care organisational development activities take the environment rather than the individuals as the main target. However there should be formal evaluation of change.

14. SOCIAL SUPPORT

As discussed in chapter 4, social support operates through direct effect (i.e. social support is beneficial in its own right) and it acts as a buffer against stress (i.e. it protects the individual from the adverse effect of stress). Partner/spouse, parents, relatives and friends can be a major source of support. In addition, individuals can get support in the organisation where they work.

Support in the work environment has been studied and found to be beneficial to the workers. Supportive behaviour of managers and co-workers can improve productivity, staff morale, and prevent several types of

occupational stress. GPs appear to be in favour of stress support (Young and Spencer, 1996; Braithwaite and Ross, 1988). Creation of a network system is only possible if everyone in the organisation is willing to participate. It is therefore necessary to make the members aware of the benefits of such a system and then motivate them to participate in such a scheme. Motivation is required both at individual and organisational level.

Social support can be set up in different ways in primary care. All the different groups of professionals in primary care would benefit from setting up a 'support network' system. This works by members of each profession (e.g. district nurse, health visitors, practice nurse), forming small groups. The number of individuals in each group will vary according to the number of people in that organisation. A group of ten members could form five colleague pairs so that when a problem is experienced by a member, he/she can feel free to discuss it with a fellow colleague in a non-threatening and comfortable environment but, if a solution is not found, this pair may wish to involve one of the other pairs. Ultimately, the whole group may meet and try to find a solution. If all fails, then outside help may be required. Support groups can also be set-up by mixing members from different professions (e.g., doctor, practice manager, health visitor and practice nurse). The group may have members with differing views on organisational and personal matters but these differences may soon be compromised once the aim of the group is perceived as helping each other. The group can meet regularly which will enable the members to explore the issues relating to stress; for example identifying the causes of stress, ways of coping with particular stressors and coping with stress on a long-term basis.

The ability to acquire the attitude for giving and receiving can be developed through learning. Individuals with similar interests may join self-help groups, including Alcoholics Anonymous (for individuals with drinking problems and their families), and other social interest groups. It is important that the NHS management provides confidential support, for example counselling, occupational health services and referral services. This is described elsewhere in this chapter.

14.1 Family Support

The family is a major source of support for the individual, providing the problem solving, listening, and accepting behaviour that are essential to alleviate stress, even though they may be unable to change the circumstances that created them. Myers *et al.* (1975) found that people who were more integrated in society (i.e. being married with children and of higher socio-economic status) coped better with different negative life crises than those not as integrated.

A number of writers give importance to wives' behaviour and attitudes in bettering or reducing the effect of stress on the family (Cooke and Rousseau, 1984; Billings and Moos, 1982). For example, Burke and Belcourt (1974) examined the compatibility of 190 husband-wife pairs (husbands were either accountants or engineers) and their impact on stress management. They found that the more compatible the wives and husbands were, the greater was the likelihood of coping with stress-related problems at work and at home. Therefore, it is necessary for the families to support each other at home in order to overcome the factors contributing to stress.

14.2 Working Women and Dual Career Couples

Working women and dual career couples have special problems. Our study shows that women general practitioners experience additional stressors in comparison to their male counterparts. In a dual-career doctor family, the burden of on-call hours, sharing house work and child care become complicated and stressful. Hence a balance has to be made between working lives and personal lives. In addition, we found from our study that some sections of primary care structure had predominantly women members (e.g. receptionists, practice managers, district nurses, health visitors, practice nurses). There are several ways in which the organisations can help to reduce stress amongst working women and dual career couples. Lewis and Cooper (1988) highlight a number of 'flexitime' approaches that organisations can provide for dual career couples. When spouses have non-traditional sex roles the flexitime system can be extremely helpful for both of the partners, reducing the stress of combining work and family. For example, primary care professionals could use a system, which allows the employees to come and go within the flexible time range set by the organisation. A net number of working hours has to be met for a given period of time, and then people are free to choose their own working times. They may find it useful to follow the flexitime system, especially the 'flexiyear' system, adapted by several German firms in which a total number of working hours is decided for the whole year, and the employees are free to choose their own working time. This system allows the employees to choose to work fewer hours during school holidays, and makes the other activities easier. Some organisations can be flexible in allowing their employees to do the same job in their homes (flexiplace). For example, a secretary in the surgery could take the dictation work to her home where she can work while being with her family. Other primary care members also can use the flexiplace system to take home suitable work. Other flexible working arrangements such as part-time work, job sharing and career breaks can be considered by practices.

In this chapter we have discussed stress management at the organisational level. Some of these strategies have been tried in industry with success. General practice is rapidly turning into a business style organisation. Therefore there is a need for general practitioners to adopt some of the suggestions given in this chapter, which may provide a great sense of achievement and satisfaction, and a less stressful work life. This is now the appropriate time for practices to be redesigned to suit the primary care professionals of the future. In the next chapter we will consider the future of general practice mainly focusing on resources and training.

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Chapter 9

THE WAY FORWARD

The approach taken in this book implies that it is important for the primary care professionals to identify the stressors and then find out ways of dealing with stress. The organization should take some responsibility and develop policies for managing stress. This is discussed in chapter 8. In this chapter resources and training will be considered.

1. RESOURCES

In 1998 the total expenditure on health in the UK with an annual GDP of 6.8% was much lower than USA (12.9%), Canada (9.3%) and other European countries (e.g. France, 9.3%; Germany, 10.3%; Netherlands, 9.3%; Switzerland 10.4%, OECD, 2001). The expenditure on hospital services was 60%, general medical services (general practice) 20% and Public Health 20% (Fry and Horder, 1994). Between 1979 and 1991, the share of the current NHS expenditure allocated to primary care increased (Baggott, 1994). But the increase in funding was felt to be inadequate to meet the demands. Introduction of budgetary restrictions on prescribing (indicative prescribing), limitation on appointment of ancillary staff by GPs and increasing volume of transfer of services from the hospital sector to the community have created financial restrictions. "There have been doubts about the adequacy of primary care funding in view of increasing demands for services" ,Baggott, 1994). In spite of a positive move by the government to reduce the waiting time for hospital admissions, there are still long waiting periods in several departments.

The primary health care team holds the key to delivering quality health care. There is a need for appropriate development of this sector with adequate funding. The transfer of hospital services to the community needs

to be resourced adequately. The primary care in the future is likely to take on a new shape as more and more practices are entering into Personal Medical Services (PMS) pilots. The PMS practices will need to work harder to improve patient care by providing various services. These practices will be inclined to seek out more cost effective forms of care. As GPs are involving themselves with finance and management, it might add to their work related stress problems unless they receive adequate training.

2. TRAINING

GPs do not feel that there is sufficient training for them to do the job that is now expected of them, e.g., managing the practice and dealing with social problems (Rout and Rout, 1993). All the primary care team members can receive training in people management and organisational skill development. The social skills and management skills are already available from those used by industry (Cooper, 1982) and could be easily adapted to help the primary health care professionals cope better. Training should be provided to improve interpersonal and communication skills in staff and doctors. The issue of stress management could be introduced as a continuous assessment approach to self development and management. Training in delegation and other management skills needs to be provided during the training period. Some authors have pointed out that removing some of the factual load from the undergraduate curriculum for doctors could allow the inclusion of topics such as communication skills, team work, interaction with technology, audit and management (Lowrey, 1992; Rout and Rout, 2000). Tokarz *et al*. (1979) suggested the importance of introducing stress management as a part of the curriculum in post graduate training courses in medical school.

There needs to be a greater understanding and communication as to what the differing roles of those in primary care professions actually encompass. Due to the great many changes that have taken place there is a lack of clarity and understanding. Not only do GPs, therefore, need training to deal with their added responsibilities, but so too the other members of the primary care team, so that they can adjust to their changing roles. In addition, the practices need to take an initiative in providing widely available training courses to their reception staff. Perhaps doctors themselves might take the initiative in giving tutorials or arrange sessions for their reception staff to enable them to differentiate between urgent and non-urgent conditions of patients. GPs also need to provide training for their staff to deal with the trauma of death and dying, especially the practice nurses, by sending them to attend update courses. They must ensure that adequate in-service training is provided to allow staff to keep their skills up-to-date. Failures are inevitable

in any profession, particularly medical and nursing professions. Therefore, training should be provided in the techniques of coping with blame when there is a failure. However, it is important for these professionals to learn to live with uncertainty and failure as some of the factors are considered to be inherent to the job and may not be possible to alter.

Appropriate stress management strategies need be developed, targeted at the primary care professionals, to reduce or eliminate stress. For example, the NHS could take the initiative in consultation with those working in general practice to design and implement appropriate stress management strategies.

3. CONCLUSIONS

Stress must be recognised in relation to, the ability of the primary health care professionals to tolerate it, the personality of the individual primary health care professional, and the way he or she perceives and interacts with the environment. It may not, however, be possible to alter the demands as some of the factors are considered to be inherent to the job, but it can be suggested that adaptation to the environment needs, change within the individual and acquiring skills to deal with it. Changes in individuals and organisations cannot be expected to occur all at once. They will develop over time if organisations and individuals accept the need for change and successively progress to achieve the change. However, this is now the appropriate time for organisations to be redesigned to suit primary care professionals of the future.

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