Assessing health promotion activities of community nurses in a GP surgery in the North-East of England

Duaso, Maria Jose

Assessing Health Promotion Activities of Community Nurses in a GP Surgery in the North-East of England.

MA Thesis 2000

Maria Jose Duaso

Abstract

The purpose of this research was to study the extent to which community nurses are involved in health promotion activities in a GP surgery in the North-East of England, and to investigate whether these activities meet the needs of their clients

A combination of qualitative and quantitative research methods was used. Data was gathered through: (a) 75 non-participant observation sessions in various clinics. Field notes were analysed using the grounded theory approach; (b) 516 postal questionnaires to a random sample of the surgery patients, aged 17-45 years, covering their health status and lifestyle, and the health promotion information they have received from the GP surgery. A response of 64% was achieved. Statistical analysis was carried out using SPSS package for Windows 95; (c) A semi-structured interview with one of the general practitioners was carried out as a triangulation tool and as an additional source of information.

Nurses were found to be involved more in health promotion as a pre-set procedure in clinics, rather than on an opportunistic basis. They seem to have an approach centred in the management of illness and risk factors rather than in a health promotion model, which promotes positive health and well being. Questionnaire analysis revealed unhealthy lifestyles among the population that could be tackled through health promotion, e.g. 25% were smokers; 44% exercised occasionally; 40% had a BMI> 25kg/m^2. Mental health appeared to be an issue. A relatively low rate of lifestyle advice was observed and was also reported by the patients. A major constraint was the professionals' lack of time.

In the present study, nurses were already engaged in some health promotion although more could be done, especially during technical procedures where opportunities to promote health were missed. More effective health promotion could be planned according to the needs of the practice population.

Acknowledgements

I would like to thank all those who have contributed towards the completion of this study. Firstly I would like to thank the nurses, doctors and staff at the GP practice where the study took place, who were very helpful and supportive during the observation period.

Thanks to all the staff at the Centre for Health studies, at the University of Durham, particularly to my supervisor, Dr. Philip Cheung. I have appreciated his continual guidance throughout this research.

I would also like to thank the Escuela Universitaria de Enfermería in the University of Navarra (Spain) for funding my studies and for their moral support during this time.

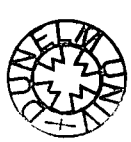
Table of Contents

Chapter 1

Introduction

During the last fifty years there has been a shift from a traditional approach of diagnosis and treatment of illness to a prediction of risk and promotion of health and wellbeing (Dahl, 1995). In 1927, in England a Central Council for Health Education was established, financed by local authority public health departments. Its main responsibility was to provide information, which would persuade the public to change to healthier habits. In 1968 the Health Education Council was set up with a view to creating a climate generally favourable to health education and to developing programmes of education targeting specific groups. Townsend in 1982 and Whitehead in 1987, pointed out the link between poverty and health and that the gap in health between the rich and the poor had widened (Townsend, 1982; Whitehead, 1987). This suggested that, health education and health promotion should adopt appropriate strategies to eliminate poverty linked health issues.

Further changes in health promotion were brought about by the introduction of the 1990 contract for general practitioners (Department of Health, 1989a). This contract intended to encourage change from treatment to prevention by offering financial incentives to GP practices in establishing health promotion clinics. This work was mainly undertaken by nurses working in the community, especially practice nurses whose numbers trebled in England and Wales since 1987 to over 15,000 in 1993 (Atkin *et al.*, 1994).



In spite of the shift in emphasis and approach from the traditional medical focussed approach to treat ill-health to the doctrine of prevention, progress has shown to be extremely slow. Even in the 1990s the view of health is linked with absence of disease or need of medical intervention (Blaxter, 1990). Furthermore, chronic conditions, such as depression or heart disease have their roots in a combination of biological, social, economic, environmental and behavioural causes. A disease specific approach is no longer adequate.

Current health trends in England suggest promotion of health and well-being is needed. For instance, in 1996 61 % of men and 52% of women were found to be either overweight or obese (Department of Health, 1998a). Smoking is the single greatest cause of avoidable illness and preventable health in this country and diet accounts for about a quarter of cancer deaths in the UK (Department of Health 1998b). The government national health strategy, *Saving Lives: Our Healthier Nation*, identified four targets for action. These are: heart disease and stroke, accidents, cancer and mental health. (Department of Health, 1999a). This paper perceives nurses as key agents and contributors to these targets by promoting changes in peoples' health behaviour through care delivery in different situations.

Ideally, nurses and doctors working in primary care are key figures to promote health. Because of their close relationships with patients registered with GP practices, primary health care teams are more likely to identify health issues and needs of the population and provide health promotion and education accordingly. Within the nursing profession, practice nurses are concerned in large part with health promotion among the practice population. In many ways, the practice nurse acts as a change agent attempting to help individuals assessing their own lifestyles and habits and promoting consciousness awareness of the need to adopt a healthier lifestyle if and where appropriate. It is suggested by Ottway that the most successful type of change agent is someone who can work with people, who inspires confidence and trust in their clients (Ottway, 1980). In addition knowledge and communication skills are essential elements in health promotion and health education, in particular the ability to listen to clients, ask appropriate

questions during the consultations and being able to pass on complex medical knowledge.

Almost 10 years on from the introduction of the 1990 GP contract, how successful is the Department of Health's intervention? What contribution has the practice nurse been able to make in health promotion terms? Two major randomised controlled trials took place in England to assess the effectiveness of health checks by nurses in reducing risk factors for cardiovascular diseases. (Family Heart Study, 1994; Imperial Cancer Research Fund OXCHECK Study Group, 1995). Although the reports of these studies called into question the efficacy of general population interventions in general practice, they do demonstrate positive effects on health promotion activity in terms of diet and cholesterol levels. Qualitative research conducted about nurses' health promotion role, suggest that nurses have a positive attitude to health promotion although their understanding of the concept is more centred on ill-health than well being (Davis, 1995; Le Touze, 1996). Most of the studies have focussed on surveying the nurses but there are few that have considered the patients' perceptions of the role of nurses in health promotion (Poulton 1990, Silagy *et al.*, 1992; Eggleston *et al,*. 1995)

In spite of the growing literature found on health promotion, very few studies exist that evaluate health promotion activities taking into consideration the views of the nurses and the clients at the same time. Perhaps one of the most interesting pieces of work in relation to this is that by Sourzti and colleagues (1996). They found that nurses were involved in opportunistic and organised health promotion focused mainly on lifestyle and ill-prevention. They measured the awareness of the patients about the health promotion activities available, however they did not measure the actual health needs of the patients to check whether these activities were appropriate to them.

Because health promotion should be provided according to the local needs, the present study aims to explore the extent to which community nurses are involved

in health promotion activities and to investigate whether these activities meet the needs of their clients. More specifically, the purposes of this investigation are:

- to identify the type of activities developed by community nurses in a particular practice,
- to examine the extent to which the activities carried out by practice nurses and district nurses in a GP surgery are evidence based and if so to determine the type of evidence,
- to determine the extent to which the activities provided by the practice meet the population's needs,
- to ascertain the long term goals of a GP centre in providing health promotion in the year 2000 and beyond.

To achieve these goals, a combination of qualitative and quantitative methods of research was considered. The research took place in a GP surgery in the North East of England. This project included the work of three categories of nurses in primary care who share the responsibility of health promotion. However, because of the development of practice nurses more attention is given to them. Non-participant observation was used to investigate the quality and pattern of communication between the nurse and the patients. A postal questionnaire was sent to 516 patients to explore their views and needs about health promotion. A semi-structured interview with one GP in the surgery was carried out to obtain additional information and to triangulate the data obtained from other sources.

The ultimate contribution of the current study may help to understand better the problems and challenges that community nurses will have to face in the field of health promotion in the future. Equally important is that the findings in this study may enable a GP practice in the North-East of England to plan for the future based on the evidence submitted by the practice population.

This report is organised into seven chapters. The following one, presents the theoretical background and empirical research on health promotion developed during the last 20 years. Recent history has seen a series of international

conferences establishing the roots of health promotion. To understand health promotion it is essential to know what it is that is to be promoted, therefore the concept of health is explored. Different authors have attempted to conceptualise health promotion into models. Some of those are presented so that one can identify which one better suits the practice under study.

Chapter three presents the aims pursued and the methodology used during this project. The reasons why each method was selected and explanation of the advantages and disadvantages are given.

Chapter four provides a background description of the area in which the study took place. Demography, mortality and morbidity statistics are studied to interpret the findings in the context of the area characteristics. The fifth chapter presents the results of the non-participant observation carried out in "A" surgery. The results from the postal survey designed to identify needs and views of the practice population are presented in chapter six. The last section of the results, chapter seven, deals with the interview with a general practitioner to find out their views about health promotion in the surgery.

Many topics are covered during the analysis of the results. Some of them, given their implications for practice, are discussed in chapter eight. The report ends by drawing some conclusions and suggesting several issues for further investigation.

Chapter 2

Conceptual Bases of Health Promotion: Review of Literature

2.1. Introduction

This chapter explores the nature of health promotion as a discipline. First it will give a brief overview of the history of health promotion. Then, an attempt to explore the concept of health and some of the health promotion models proposed by different authors will be made. Finally it will present a review of the lastest empirical research on community nurses and health promotion.

2.2. Historical evolution

Several authors have pointed out the Lalonde Report *A New Perspective on the Health of Canadians* as the introduction of the health field concept (Bunton & Macdonald, 1992; King 1994; Jones,1997). This document presents a wider concept of health saying that people's health is not just influenced by human biology but also by lifestyles, environment and health services. (Lalonde, 1974). The Canadian initiative was seen as a good example of a plan for a national strategy for health, based on preventive factors rather than curative. Elsewhere,

countries such as Germany, Sweden and Denmark established national targets for health (Jones, 1997).

Three years later, in 1977 the World Health Organisation launched the initiative of *Health for all by the Year 2000* (WHO, 1977) which proposed health education and socio-economic change as strategies to achieve this goal. This was reinforced by the International Conference on Primary Health Care in Alma-Ata (USSR), which expressed the need for urgent action to protect and promote the health of all the people in the world (WHO, 1978). Primary health care was perceived as the key to attain a level of health for all which could permit people to lead a socially and economically productive life. The conference set a new direction for health policy calling for investment in health promotion and prevention rather than clinical and curative services.

The first formal proposal of health promotion at an international level was made at the First International Conference on Health Promotion *The Move Towards a New Public Health* held in Ottawa (Canada), in 1986. This conference resulted in the Ottawa Charter for action to achieve Health for all by the year 2000 and beyond. This charter defined health promotion as "the process of enabling people to increase control over and improve their health" and identified five priority areas of action: build healthy public policy; create supportive environments; strengthen community action; develop personal skills and reorientate health services. (WHO, 1986). Political, economic and social changes were introduced as tools to achieve health for all. Health was emphasised as a positive concept. Yet, this charter has been criticised for producing a "catch- all framework for health promotion in which priorities are unclear" (Jones, 1997:7).

The following international meeting on health promotion was held in Adelaide (1988). The conference continued in the direction set at Alma-Ata and Ottawa, but set more concrete proposals. Four key priority areas were identified namely, public health policy; improving women's health; food and nutrition; tobacco and alcohol; and creating supportive environments (WHO, 1988).

The Sunsdvall Conference in 1991, third of the international conferences, highlighted the links between health and the physical environment. The resulting statement pointed out that the increasingly degraded environment was threatening people's health and making the goal of Health for All by the Year 2000 hard to achieve. (WHO, 1991). The proposals for action reflected two basic principles: equity in distributing responsibilities and resources and interdependence of the human beings, taking into account the needs of future generations when managing natural resources.

The last WHO's international conference was held in Jakarta in 1997 to evaluate the impact on health promotion and identify new strategies. Five priorities were established to lead health promotion into the 21st century,

- promote social responsibility for health
- increase investments for health development
- consolidate and expand partnerships for health
- increase community capacity and empower the individual
- secure an infrastructure for health promotion.

(WHO, 1997a: http://www.who.int)

Particular settings for health, such as "healthy cities", "health promoting schools", "health promoting workplaces" or " health communities", were presented as practical opportunities for the implementation of comprehensive strategies. Member States were urged to adopt an evidence-based approach to health promotion and policy in practice.

The Fifth International Conference on Health Promotion "Bridging the Equity Gap" will be held in Mexico City, Mexico in April 2000. One of the aims of the conference is to show that health promotion makes a difference to health and quality of life (WHO, 1999).

2.3. The concept of health

Before exploring the health promotion concepts and models it is essential to understand what it is that is to be promoted.

Katz and Peberdy (1997) suggest that there are differences in the way individuals and social groups define health. Young people tend to define it in terms of fitness, energy, vitality and strength whereas older people are more likely to view it in terms of resilience and coping. The Constitution of the World Health Organisation defines health as:

> "a state of complete physical mental and social well-being, and not merely the absence of disease or infirmity"
>
> (WHO, 1946:5)

This definition includes psychological and social dimensions. Health is no longer viewed just as an "absence of disease". However, this most commonly quoted definition of health has been widely criticised as unattainable. Any disturbance might come to be seen as a health problem and people with disabilities and chronic conditions are inevitably labelled ill when they are otherwise healthy. Saracci (1997) argues that this state of complete physical, mental and social wellbeing is much closer to happiness than to health and therefore it cannot be delivered or imposed. He proposed a descriptor of health as a "condition of well-being free of disease or infirmity and a basic and universal human right" (Saracci, 1997: 1409).

Both definitions include a negative and positive view of health. Negative in terms of absence of disease and positive as presence of wellbeing. But what do we understand by wellbeing and disease?

Wellbeing is a complex concept. We can talk about physical wellbeing as being able to execute everyday tasks without discomfort; whereas psychological wellbeing is the ability of enjoying life and of overcoming frustration, stress and problems. Social wellbeing has to do with having control over one's life and being

able to develop one's talents. According to Downie and colleagues, "feeling of wellbeing" and "true wellbeing" are two different concepts. Feeling of well being is mere subjective estimations of moods and therefore spurious, whereas true wellbeing involves empowerment and autonomy. They defend the view that the state of positive health entails a balance of the physical, mental and social wellbeing (Downie *et al.*,1990:18).

On the other hand, disease is a more technical term. It refers to a specific condition of ill-health which is identifiable as similar to that suffered by others (Jones, 1997). Disease is often interchanged with illness. Illness refers to the subjective state of feeling unwell. Those terms do not always go together, one can have a disease but without feeling ill or the other way around, a person can feel very ill without the evidence of a disease.

Because it is easier to record death and sickness, health tends to be measured in terms of disease (morbidity and mortality rates, for instance) rather than positive measurements. Some positive measurements of health have been developed such as the Nottingham Health Profile (Hunt *et al.*, 1986) or the quality adjusted life year, QALY (Gudex, 1986) but still most of the medical literature tends to measure health in negative terms.

As can be seen, health is not an absolute concept. Definitions of health include disease and wellbeing concepts. To define health one should consider the social, mental and physical dimensions of individuals. Health has been claimed to be a basic and universal human right.

2.4. Health promotion

Health promotion has been conceived as:

> ... the process of enabling people to increase control over, and to improve, their health
>
> (World Health Organisation, 1986: http//www.who.int)

> Health promotion comprises efforts to enhance positive health and prevent ill-health, through the overlapping spheres of health education, prevention, and health protection.
>
> (Downie *et al.*, 1990: 2)

> ... actions and interventions to support and enhance people's health
>
> (Jones, 1997b:3)

> ... an umbrella term that includes all those activities intended to prevent disease, improve health and enhance well-being.
>
> (Naidoo and Wills, 1998: 3)

Among these different definitions it is possible to distinguish several common elements in the field of health promotion: prevention, health education and health policy.

2.4.1. Prevention

Prevention activities aim to protect health through avoiding illness. They are classified into three groups according to the stage of disease development in which they act. We can talk about primary, secondary and tertiary prevention.

Primary prevention aims to eliminate the possibility of getting a disease, e.g. immunisation. Secondary prevention includes all measures directed towards early detection of diseases, e.g. cervical screening. Tertiary prevention refers to the control and reduction of an already established disease, e.g. diabetes clinics (Lilienfield, 1980).

An epidemiological interpretation of the different levels of prevention is that primary prevention is aimed at reducing incidence of disease, secondary prevention aims to reduce prevalence by shortening the duration and tertiary prevention is aimed at reducing complications (Last, 1988).

2.4.2. Health education

Health education can be defined as a process of giving advice or information in order to facilitate the development of knowledge and skills to enhance positive health and prevent disease.

According to Downie, Fyfe and Tannahill (1990:28) it is not only about "telling people what they ought do to be healthy", it is a communication activity aimed at improving health and preventing illness through influencing beliefs, attitudes and behaviour.

Health education has evolved from disease-orientated to a health-orientated approach, taking into account the importance of socio-political factors in health related behaviour.

2.4.3. Health policy

Health policy comprises legal, fiscal or political policies aimed at protecting health. Examples of health policies are the seat-belt regulations or the legal control of alcohol and tobacco sales to minors.

The Adelaide Charter (WHO, 1988) emphasised the goal of health public policy saying that it should make healthy choices possible or easier for citizens. Health policy is responsible for creating supportive environments, it should work to transform physical, social and political environments so that health can be more easily protected and improved.

2.5. Health promotion models

A model is a simple description of a system (Crowther *et al.* 1997). It is a way of bridging the gap between theory and practice. Since the term "health promotion" appeared in the 80s, different authors have attempted to conceptualise health promotion into models. Rawson and Grigg in 1988 identified about 20 different models of health promotion (as quoted by Naidoo and Wills, 1998). This section will cover four of the most influential ones.

Ewles and Simnett (1985) presented a model with five approaches to health promotion based in their observation of practice - (i) medical, (ii) behaviour change, (iii) educational, (iv) client centred and (v) societal change -. Different types of health promotion activity were seen as important in each approach. For example the medical approach will seek for early detection and treatment of disorders while the client centred approach will try to provide the client with understanding about the risk of unhealthy lifestyles. The authors noted that any of these approaches is valid and that in health promotion there is no "right" approach or set of activities.

Tannahill (1985) proposed a health promotion model that comprises three overlapping spheres of activity: "health education", "prevention" and "health protection".

Figure 2. 1. Tannahill's model of Health Promotion (Tannahill, 1985)

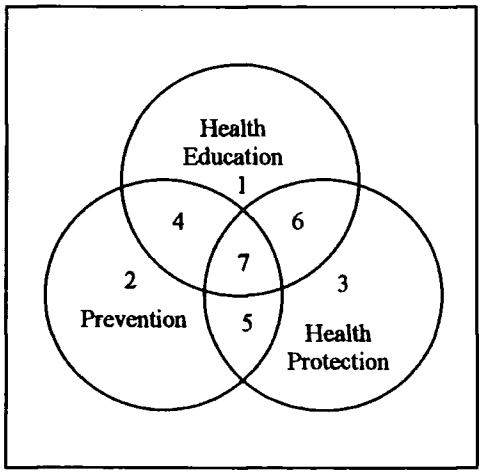


Figure 2.1. represents the seven possible dimensions of health promotion within these intersecting circles:

1. Health education: it includes educational activity aimed at positively enhancing the well-being of a person.
2. Preventive procedures, e.g. immunisation or screening.
3. Health Protection: decisions by local, national or international governments or other bodies, which will promote positive health, e.g. public funds for the provision of sport facilities.
4. Education with a preventive focus, e.g. encourage clients to have immunisations.
5. Preventive health protection: decisions by significant bodies, which encourage preventive measures, e.g. seatbelt legislation.
6. Health protective health education with a positive orientation, e.g. stimulating a social environment to create pressure for funds for sport facilities.
7. Health education for preventive health protection, e.g. lobbying for seatbelt legislation.

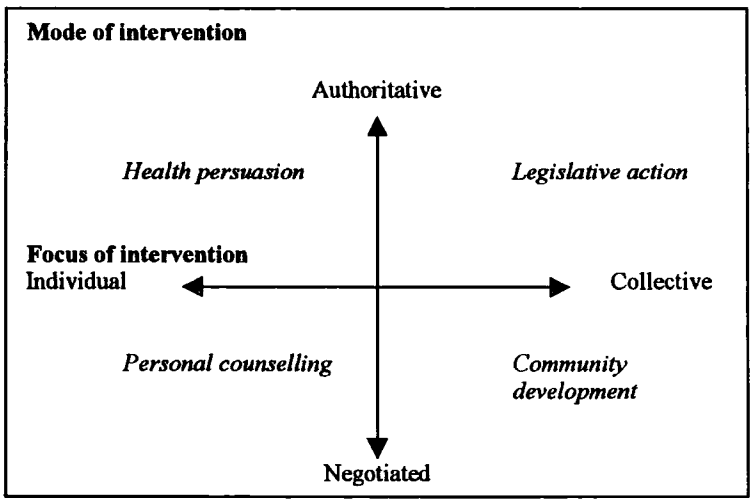
The Tannahill model emphasises the fact that in practice health promotion is an overlapping activity. For instance, nurses tend to carry out preventive and education activities, but they can also be involved in health policy ones. This model includes both positive and negative aspects of health and takes into account the political dimension.

Tones, Tilford and Robinson (1990) identify three approaches to health promotion: preventive, radical-political and self-empowerment. The preventive approach aims to persuade the individual to take decisions that will prevent disease. This approach has been criticised as victim blaming. Critics claim that it is not fair to blame the individuals for adopting unhealthy lifestyles when society itself engenders and sustains unhealthy habits (Ryan, 1976). On the other hand, the radical-political approach seeks to promote social and environmental rather than individual change. The third approach, self-empowerment, fosters the idea of

informed choice. The authors give central importance to this last one, arguing the goal of health promotion is to help the community to make its own decisions.

Beattie's model (1991) distinguishes between the mode of the intervention (authoritative-negotiated) and the focus of the intervention (individual-collective). It suggests four approaches for health promotion: health persuasion, legislative action, community development and personal counselling. This model clearly shows how health promotion is established in the socio-cultural and political framework. Figure 2.2 illustrates the model.

Figure 2. 2. Beattie's model of health Promotion (Beattie, 1991)



Examples for each quadrant of the model (Figure 2.2), reading clockwise from the top-left could be: encouraging patients to quit smoking, seat-belt legislation, healthy-working place project and a psychotherapy session.

Reading through the models it can be seen that health promotion is a contested area. It is difficult to ascertain its boundaries and what sorts of activities it entails. However, it could be argued that, health promotion should be directed to all determinants of health. An approach limited to prevention and lifestyles, excludes an important determinant of health, the social dimension. Health promotion interventions should be negotiated rather than authoritative if we aim to empower people to make healthier choices.

During the analysis of the observations carried out in the practice under study an attempt will be made to evaluate the health promotion given according to each model.

2.6. Empirical research

Review from the empirical research, carried out in the UK, on health promotion activities by community nurses reveals that both quantitative and qualitative approaches have been used to investigate the field.

Several studies have explored the level of health promotion activity in primary care. Studies through the 1980s and early 1990s indicated that health promotion was not yet the main role of the nurses, they had a wide but ill-defined role (Hockey, 1984; Bowling, 1987; Stilwell, 1991). This situation seemed to change after the introduction of the 1990 contract for general practitioners (Department of Health 1989). Several studies revealed a growing activity in terms of health promotion as a result of this contract (Atkin *et al.* 1994; Broadbent, 1998). However recent studies have suggested that nurses should develop their health promotion role further (Calnan, 1994; Deeham *et al,* 1998; Norton, 1998).

Several authors have searched for evidence of effectiveness. Those studies have evaluated, through experimental designs, the outcomes of health promotion activities. The two major randomised control trials that took place in England were the OXCHECK and the Family Heart Group studies. The OXCHECK trial assessed in five urban general practices, the effectiveness of health checks by nurses in reducing risk factors for cardiovascular diseases. The results suggested that nurse-run health promotion clinics did not result in smoking cessation but were successful in helping patients to modify their diet and total cholesterol (Imperial Cancer Research Fund OXCHECK Study Group, 1995). The other large RCT was carried out by the Family Heart Study Group (1994), and aimed to evaluate the effect on cardiovascular risk factors of a nurse-led programme of screening and advice for behaviour change over a year. The intervention resulted

in a small reduction of cholesterol levels, blood pressure and smoking rates. The authors argue that the results did not justify the government's population screening program, especially in terms of cost effectiveness (Langham *et al.* 1996). However these findings were debated and more optimistic critics argued that the findings were sufficiently positive to support the work in this area (Doyle & Thomas, 1996).

Recently, another randomised control trial has tried to evaluate over a year the effectiveness of nurses running secondary prevention clinics for coronary heart disease. The authors concluded that the clinics improved patients' health and reduced hospital admissions (Campbell *et al.*, 1998).

Although most of the research on effectiveness of health promotion is carried out under experimental designs, Speller and colleagues (1997), question whether randomised controlled trial is the most appropriate method of evaluating health promotion. This view is supported by Macdonald and colleagues, who express the need for qualitative research, because "even the simplest health promotion activity is more complex than the administration of a pill or even a surgical procedure" (Macdonald *et al.*,1996:370). Katz and Peberdy (1997) also say that qualitative research is crucial to understand what is happening in the natural setting.

Qualitative research on the topic has been conducted to investigate nurses' views about health promotion. Davis (1995) carried out an investigation into nurses' understanding of health promotion. Using questionnaires and group interviews the authors concluded that nurses, although they see their roles as health promoters, should focus on health and wellness rather than illness and disability. Le Touze (1996) conducted similar research. She examined the views of practice nurses and GPs about health promotion. The study suggests that practice nurses have a more positive attitude to health promotion than their GP colleagues, although nurses complained about the increase in paperwork and administration of the data collection.

Most of the studies have focused on surveying the nurses but there are few that have considered the patients' perceptions of the role of nurses in health promotion (Poulton 1990, Silagy *et al.* 1992). Eggleston and colleagues (1995), sent postal questionnaires to patients in order to determine their views about the provision of health promotion advice by general practitioners and practice nurses in general practice. They found that health advice received from the GP and the practice nurse was equally acceptable and that it is the ability of the health professional to respond to patients' concerns that was important for the patients.

In spite of the growing literature found on health promotion, very few studies exist that evaluate health promotion activities taking into consideration the views of the nurses and the clients at the same time. Perhaps one of the most interesting pieces of work in relation to this is that by Sourzti and colleagues (1996). They investigated, through questionnaire observation and interviews, nurse's involvement in health promotion and the client's perceptions in four different District Health Authorities. They found that nurses were involved in opportunistic and organised health promotion focused mainly on lifestyle and ill-prevention. They measured the awareness of the patients about the health promotion activities available, however they did not measure the actual health needs of the patients to check whether these activities were appropriate to them.

Because health promotion should be provided according to the local needs, the present study aims to study the extent to which community nurses are involved in health promotion activities and to investigate whether these activities meet the needs of their clients. Using a case study approach, it tries to provide detailed information using multiple sources of data and a variety of perspectives. Details about the methodology are presented in the following chapter.

2.7. Summary

Health promotion has evolved from relatively narrow origins with focus on changing people's health behaviour to a broader movement, which aims to work at the level of individuals, families and communities. Health promotion is concerned with improving health taking into account that people's health is influenced by biological, lifestyle, environmental and socio-economic factors.

Various models of health promotion have been presented. Although they represent different ways of conceptualising health promotion, they are not mutually exclusive. Chapter 5 will refer to them in order to interrogate and analyse existing practice.

Review of the empirical research carried out on health promotion and community nurses in the UK reveals that both quantitative and qualitative approaches have been used to explore the field. However it seems that few studies have considered a combination of both methodologies to explore whether health promotion meets the patient needs.

Chapter 3

Methodology

3.1. Introduction

Since the intention of the study was to evaluate health promotion activities carried out by community nurses in a natural setting, it was considered appropriate to select a GP practice near the university as a bases for research.

Several authors have pointed out the benefits of integrating quantitative and qualitative methodologies in health promotion research (Macdonald *et al.*, 1996; Brinton *et al*, 1998; Learmonth & Cheung, 1999). This chapter will explain the rationale of the methods used during the study and their advantages and limitations.

3.2. Research approach: case study

Health promotion should be considered in the context of a local population which is covered by a GP practice. In which case, the undertaking will be regarded as a case study. Yin defines a case study as a piece of research which examines most or all aspects of a particular unit or case (Yin, 1989). Case study is not a method of research, but the choice of object to be studied. A case may be an individual, a family, a community or an organisation.

This project aims to explore health promotion in a primary care setting. The author chose randomly a GP Surgery in County Durham named "A". That is what Stake calls "instrumental case study" (1994: 237). The surgery was not selected because of its particularity, it played a supportive role. It allowed access to the population for which the study is designed, and facilitated data collection to improve the researcher's understanding of health promotion.

When doing a case study it is very important to seek what is common and what is particular about the case. Before carrying out the non-participant observation and designing the postal questionnaire, the author investigated demography, morbidity and mortality characteristics of the region in which the surgery is located.

3.3. Observation

Observations were carried out during seven non-consecutive days in November 1998. The author used the ethnographic approach. Historically, the ethnographic method has been used by both anthropologists and sociologists. Hammersley and Atkinson (1983) describe the method as,

> ...the ethnographer participates in people's daily lives for an extended period of time, watching what happens, listening to what it is said, asking questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned.
>
> (Hammersley & Atkinson, 1983:2)

This method is characterised by giving a detailed investigation of a small number of cases in a natural setting. Strong emphasis is placed on exploring the nature of the problem rather than testing hypothesis (Crabtree & Miller, 1992).

Observation studies can be classified into participant and non-participant observation according to the degree to which the researcher is immersed in the group studied. In participant observation the researcher is a member of the group under study and his identity is normally hidden (Forcese and Richer, 1973). The

advantage of this method, assuming that the subjects under study do not know they are being observed, is that their behaviour will be natural and less influenced by the researcher's presence. However, being a member of the group under study implies being involved in the activities they perform. The researcher can be so busy in carrying out certain activities that he or she does not have time to observe the rest. Non-participant observation was the method used in this case study in order to have a more holistic perspective of behaviours and interactions in the practice.

A pilot exercise was carried out observing activities performed by practice nurses and district nurses in order to understand the setting, meet the nurses and develop the methods of collecting the data. A check list was subsequently designed and used as *aide memoire* during the observations (appendix A).

In surgery "A", each practice nurse seen on average 120 patients per week; 10 per cent in specific clinics, such as family planning, diabetes and asthma clinics, and 90 per cent of them in general sessions[1]. A schedule to observe the whole range of activities was planned, including a wound management clinic carried out by district nurses. A convenience sample[2] of patients consultations was obtained.

As a non-participant observer, the author was sitting at one side of the room, near the patient and the nurse, observing the activities in action and the interaction between them. Although the researcher role was that of observer, the author participated in conversation initiated by those being observed. This was of importance in building a relationship with them and also provided an additional source of information.

Notes were recorded during and mainly after the session, while the nurse was updating the records. Complete recording of the notes was carried out on each day

[1] General sessions refers to those consultations that do not have a specific health promotion purpose.
[2] Convenience sample- it involves choosing the sessions carried out at the time of data collection and continuing that process until the required sample has been obtained. (Cohen & Manion, 1980)

of observation as the quantity of information collected was too much to categorise at the time. The compilation of field notes may appear to be a straightforward matter but it is skill demanding and requires great care and attention. In this research selection, summary and interpretation might have played a part, as it was impossible to record everything that was said. Field notes are presented in appendix B.

Whilst the use of recording equipment, audio or audio/visual, would have reduced the need for note taking, this was considered to be too obtrusive and would have created ethical problems as to its usage and storage.

The grounded theory approach was used for the analysis of the field notes. This term was first presented by Glaser and Strauss in 1967. Grounded theory emerged with the purpose of closing the gap between theory and empirical research (Glaser and Strauss, 1967). This theory was first used in social and behavioural sciences and was especially influential in medical sociology, as the first two grounded theory monographs were about dying in hospitals (Strauss and Corbin, 1994). Since its introduction 32 years ago, this analytical approach has been adapted to study diverse phenomena and disciplines, e.g. education, nursing and psychology.

The rationale of this approach is that theory generates and develops during the data collection and the analysis processes. A central feature is the use of both inductive and deductive processes in what has been called "a general method of constant comparative analysis" (Glaser and Strauss, 1997: vii). The investigator begins to code, categorise, conceptualise and to write the first thoughts concerning the research from nearly the start of the study.

In this piece of research, the investigator went to the field work without a pre-determined hypothesis, just trying to collect the data in a systematic way. During the non-participant observation, ideas were emerging. Then the field notes were read and re-read carefully, focusing on not only similarities but also differences. The data was then broken into segments. Labels were given to individual

segments which were used to search for themes. Every piece of data was compared with each other to validate emerging hypotheses. Then it became clearer that there were overlapping and interconnecting themes and that these could be brought together under broader headings.

3.4. Questionnaire

The questionnaire was designed to find out about the health status, lifestyles, and health promotion requirements of patients aged between 17-45 in the practice population.

3.4.1.The sample

The reason why the sample was restricted to this age group was the benefit they may obtain from preventive health promotion. They are the working population and contribute to the growth and development of the community. Although this age group is generally the healthiest, it may have developed unhealthy lifestyles eg. smoking, alcohol, bad diet, which could affect their health in the future.

The sample needed was calculated with the equation:

$$n=\frac{z_{\alpha/2}^2 p(1-p)}{\varepsilon^2}$$

Where z is determined by the significance level of $\alpha/2$, (for $\alpha= 0.05$, $z=1.96$); p is the expected proportion one wants to measure; and ε is the precision one wants to reach (Martinez-Gonzalez *et al.*, 1997). The required sample was calculated for p=0.5, which is the percentage that requires largest number of individuals. A precision of at least 5% was pursued:

$$n=\frac{1.96^2 \cdot 0.5 \cdot (1-0.5)}{0.05^2}=384$$

Literature reviews from previous studies that have used postal questionnaires to patients from a GP Surgery showed response rates ranging from 60% to 80%. (Williams and Calnan, 1992; Ruta *et al.*, 1997). Expecting a response rate of around 75% the number of patients needed to achieve 384 responses is 512.

3.4.2. The content

As discussed in previous sections, health embraces physical, mental and social dimensions. The questionnaire tried to cover these dimensions. It was divided into three parts:

-The first part of the questionnaire, titled "personal details", enquired about gender, age, marital status, family composition, ethnic group, and socio-economic status.

-The second part of the questionnaire was concerned with, measuring lifestyle and health status of the sample. Positive and negative indicators of health were used, e.g. exercise and fitness *versus* presence of illness.

- The third part of the questionnaire was related to health promotion issues. The patients were asked about the kind of health promotion received in the surgery and any additional information they would like to receive.

3.4.3. Pilot questionnaire.

A pilot study was carried out in the surgery to remove any ambiguities contained in the questions. The draft of the questionnaire was administered to twenty patients aged 17-45. No major changes were added, just streamlining some questions as it was found that some respondents replied with more than one answer to certain questions, e.g. question about sun protection, patients made differences between sun protection for the face and for the body. The new version was piloted with another 5 persons. No further changes were made. The first and final versions of the questionnaire are presented in appendix C.

Because of the small scale and the exploratory nature of the pilot survey it has been considered inappropriate to summarise its findings. The results obtained were used to improve the questionnaire and familiarise the researcher with the analysis techniques.

3.4.4. Questionnaire administration- main study

At the beginning, the author considered the possibility of distributing the questionnaire to every patient aged 17-45 visiting the surgery until reaching the number required. This would have been the simplest and cheapest approach, however individuals who go to the practice are very likely different from those who do not (Ostbye, 1992). As this study intended to investigate a representative group of individuals, a postal questionnaire to a random sample[3] of all registered patients was considered a better option.

A computerised list of names and addresses of all registered patients aged 17-45 from the practice was obtained. Among the 3566 patients 516 were selected using random sampling technique. In February 1999, the questionnaire was sent together with a covering letter (appendix D) signed by one of the doctors of the surgery explaining the aims of the survey and asking for collaboration. A self stamped enveloped was also provided. Postal questionnaires offer the advantage of covering a large sample in a short period of time. Besides, the fact that the researcher is not present means that there will not be interview bias. On the other hand, postal questionnaires have some limitations. People of limited educational background may not be able to answer. Also, people may pass on the questionnaire to others causing distortions in the sample. According to Oppenheim (1966) a major disadvantage of postal questionnaires is the poor response rates. The problem with that is not that a reduced sample is obtained- this could be solved by sending more questionnaires- but that respondents are different from non-respondents. Those who respond might be more interested in health matters, have healthier lifestyles or visit the surgery more often.

[3]Random Sampling: is that method of drawing a portion (sample) of a population or universe that all possible samples of fixed size n, have the same probability of being selected (Feller W. as quoted by Kerlinger, 1986: pp 110)

Two measures were taken to prevent this bias. A reminder to achieve higher response rate was sent to all those patients who had not responded after the first month encouraging them to do so and providing a phone number to ring in case they needed another questionnaire (see appendix E). The second measure was to analyse respondents and non-respondents differences among gender, sex, and post code areas in order to verify the representativeness.

3.4.5. The analysis

SPSS (Norusis, 1998) was the statistical package used for the analysis of this survey. The 42 questions of the questionnaires were coded into a total of 142 variables. Open questions were codified into groups by content analysis[4] and introduced into the data base as categorical variables.

Means were compared using Student's t test. Chi-square test or Fisher's exact test were used in analyses that entailed comparisons of proportions.

3.5. Interview

Interviewing is a well established research tool in sociology and related disciplines. This technique consists in maintaining and generating conversations with people on specific topics and interpreting the resultant data (May, 1993).

Broadly speaking there are three types of interviews: structured, semi-structured and in-depth interviews. Structured interviews consist of a fixed set of questions, leaving little room for deviation from the schedule. The theory behind this method is that each person is asked the same questions so that the answers are more comparable. Semistructured interviews are conducted on a basis of open-ended questions from which the interviewer can diverge to explore an idea in more detail. In-depth interviews are less structured and may cover only one or two

[4] Content analysis involves establishing categories and then counting the number of instances when those categories appear in the text (Silverman, 1993)

issues. Further questions would be based on what the interviewee said (Fontana and Frey, 1994).

In this project semistructured interview was the method chosen to investigate the general practitioner's views of health promotion in the surgery under study. This method allowed the researcher to cover certain prefixed questions but also to explore in depth some issues raised during the interview.

A pilot interview with an academic playing the role of general practitioner was carried out to reveal problematic questions and to train the author in the use of the technique. The final questions used for the semi-structured interview are presented in appendix F.

The interview took place after the results of the questionnaire and the observations were analysed so the general practitioner could make comments on them. It was recorded and then transcribed for analysis. The interview was used as a source of additional data as well as a triangulation tool.

3.6. Ethical considerations

Since the study was essentially unobtrusive and involved observation only, ethical committee approval was not required as patients and staff were not put at any risk or discomfort by the presence of the researcher. The GP who was closely involved in the administration of the survey was fully consulted. He saw the survey as an evaluation exercise giving clues to future planning.

The general aim of the research was explained to all research subjects. During the observations, informed consent was obtained verbally from every patient prior to any observations being made. Only one patient, a young woman attending a family planning clinic, rejected being observed. The cover letter sent with the questionnaire emphasised that the responses would be confidential. During the

data analysis confidentiality was maintained by data coding to eliminate identifying data with personal information.

3.7. Limitations

Qualitative methods have been criticised for not being scientific, producing data that are subjective (Sandelowski, 1986; Hammersley, 1990). Rigour in scientific research is normally evaluated in terms of validity (i.e. whether this piece of research reflects reality), reliability (i.e. to what extent the findings reported would be found by another) and generalisability (i.e. whether the results from the study can be applied to other situations).

3.7.1. Validity

As regards the validity of the results in this study, the main question is whether the data gathered by the researcher reflects reality and whether the researcher's role intruded on the research process to such an extent that the findings are invalidated. Problems of validity in this study can be found at different stages:

- Postal questionnaire. As commented before, the response rate presents a limitation, those who do not answer might, for instance, be less interested in health matters or have unhealthy lifestyles. There is also the possibility that the patients answer what they think the researcher would like to read. The cover letter emphasised that their responses would be confidential. However, it is not possible to ensure that they have answered truthfully.

- Observation. The researcher's presence might have caused the so called "Hawthorne effect" (Mays and Pope, 1995). This refers to the bias of being observed, for instance, a patient might have felt inhibited or silent because of the observer; a nurse who knew she was being the focus of an observation might have responded much more positively to patient's questions than normally.

- Interviews can also be biased by the interviewer's attitudes. The respondent might seek the answers that support the interviewer's attitudes. The way to formulate the questions might influence the respondent. To minimise this bias, a pilot interview with an experienced researcher was carried out to reduce misunderstanding about the content of the questions.

As can be seen, each research tool presents some limitations. However one can overcome these if we compare the convergence of the results in what is called "triangulation validation." Triangulation derives from navigation, where different bearings give the current position of an object (Silverman, 1993). In this study, the author compared the results of each research tool. For instance, during the observations the number of times the nurse encouraged the patients to exercise more was measured. This was compared with the number of patients in the postal questionnaire who recalled having received such advice. Both data were presented to the general practitioner during the interview.

3.7.2. Reliability

Reliability, sometimes called repeatability, varies with the methods of research. The quantitative part of this work, the postal questionnaires could be assumed to be more reliable because it is very likely to obtain the same results when repeated under the same conditions.

Qualitative reliability is more problematic. It is difficult to ensure that other observers would have found similar results or would have interpreted the interviewee's answers in the same way. To improve reliability, field notes were taken systematically using the check-list presented in appendix A.

3.7.3. Generalisability

Case studies can be criticised because their findings might not be applicable to other situations. This is particularly true in this study, the findings of this research might not be applicable to others surgeries in England but they might be seen as a small step towards generalisation.

3.8. Summary

A combination of qualitative and quantitative methods was considered appropriate to explore health promotion in a natural setting. Observation, semi-structured interview and postal questionnaire were the tools selected to gather the data. One of the limitations of this study design is the restricted generalisability.

Chapter 4:

Case Study Background

4.1. Introduction

Health promotion should be planned according to the local needs. In this section, a description of the surgery and the demography, morbidity and mortality characteristics of the area are provided. Data is based on the last census information (OPCS, 1993a; 1993b) and Local Public Health Statistics of County Durham (Woodhouse *et al.* 1997).

4.2.The research setting

The surgery is a five-doctor partnership which opened in 1989. It is located in a residential area in a town in the North east of England. Surgery "A" provides primary health care to 9,200 patients. The boundary embraces the town area and nine villages around.

By the time the field work took place, the ancillary staff comprised the practice manager, receptionists, 2 practice nurses, 2 health visitors, secretary and computing staff. They also had 2 midwives, 3 district nurses and a counsellor who attended the surgery. A chiropodist, a dietician and a third practice nurse joined the practice later. The surgery provides a range of medical services, including

maternity care, cervical smears, family planning, minor surgery, childhood and adult immunisations, healthy heart, asthma and diabetes clinics.

4.3. Demography

In mid 1995 it was estimated that the resident population of the district (District B) where the surgery is located was 100,616, roughly divided equally between males and females. Table 4.1 shows the estimated percentage of resident population in mid 1995 for District B divided in 8 age bands. Local data are compared with the county as a whole and with the National Figures.

The data presented are mid-year population estimates for mid 1995 estimated on the basis of the 1991 census.[1]

Table 4.1. Estimated percentage of resident population in mid 1995 for the District B; County Durham; England and Wales.

Age	District B %	Co. Durham %	E&W %
0-4	6.10	5.74	6.00
5-14	12.21	11.64	12.02
15-24	11.88	11.78	11.71
25-44	24.68	25.37	26.30
45-64	24.34	24.66	24.11
65-74	9.38	9.79	9.06
75-84	8.60	8.29	8.07
85+	2.81	2.72	2.75
All ages	100%	100%	100%

(Woodhouse *et al.*, 1997)

As can be seen 6.1% of the population in this district is under five and 20.8 % is over the pensionable age. Overall the relative proportion of the resident population in the locality is very similar to the County and National proportions.

Studying the ethnic characteristics of the population and comparing them to other districts of the country, such as London where the percentage of ethnic minorities totals 25%, the presence of other ethnic groups than white in District B is low. In Distric B ethnic minorities only constitute 1.5 % of the total population. This

[1] The actual number of people in each are of England is only calculated at the 10 year census. In between census the population is estimated by adding and subtracting the numbers of births and deaths and making allowances for people moving around from place to place.

1.5% is broken down into:0.5% Indian, 0.3% Black (Caribbean, African or other) 0.2 % Bangladeshi, 0.2% Chinese and 0.3% belong to other ethnic groups.

According to economic characteristics, 75.3% of the males aged 16-64 are employed (full-time, part-time, self employed or on a government scheme) and 11.2 % are unemployed. Among women the percentages are lower, 62.6% of the females aged 16-59 are employed and 5% of them are registered as unemployed. The unemployment rate in the area is higher than the national figures. In June 1991 the unemployment rate was 11.2 %, compared with a national average of 9.7%.

The study of the households and family composition reveals that there are 40,217 households in District B, 18,037 (44.8%) of them have a pensioner. Looking at the households with pensioners, 23.3% of them have no central heating, 60% have no car and in 15.9% of the cases the pensioner is living alone.

Age and marital status: 61.3% of the population aged over 18 is married and 6.7% divorced Looking at the family composition of the households, 78.7 % are married couple, 7.1% cohabiting couple and 14% lone parent. The 38% of the families have no children. The family composition figures are in line with both county and national data.

According to the Office of Population Censuses and Surveys (OPCS), a person's occupation in one of the best available indicators of his or her position in society (OPCS, 1993b). Comparisons with national figures reveal a higher percentage of groups III, IV and V in this location (Table 4.2) This is of importance as lower socioeconomic groups have been associated with greater incidence of premature and low birthweight babies, heart disease, stroke, and some cancers in adults (James, *et al.*1997).

Table 4. 2. Social class distribution in Locality B compared to national figures.

Social Class		Location B %	England and Wales %
I	Professional etc. occupations	6.1	6.9
II	Managerial and technical	29	31.6
III(N)	Skilled occupations - non manual	14.2	13.9
III(M)	Skilled occupations - manual	29.3	27.2
IV	Partly skilled occupations	15	13.8
V	Unskilled occupations	5.7	4.7

(OPCS, 1993a; OPCS 1993b)

The population projections for Durham County by the year 2001 suggest that the overall population will remain fairly static. However, they predict sizeable changes within specific age groups. Most notable in these are the 8.5% drop in children under 5 and the nearly 16% increase in the number of people aged 85 and over. The Office for National Statistics calculates population projections based on the assumption that past trends will continue. Such projections should be interpreted with caution, for example they cannot take into account large scale movements caused by factory opening and closing. However, these projections are required to estimate future health needs.

The predicted 16% increase in elderly population implies that an extra burden may be placed on the health services in the future (Woodhouse *et al.* 1997). However, if preventive measures are in place and health promotion is targeted at the middle aged population of this study, it can be suggested that complications of chronic conditions at a later stage could be reduced and the population could be more independent from the medical services (Kemm & Close, 1995).

4.4. Morbidity

Both the *Health of the Nation* and the new White Paper, *Our Healthier Nation* highlight heart disease, cancer, mental illness and sexual health as the main health problems of the country (Department of Health 1992; 1999). These also appear to be the main causes of morbidity in Durham County.

Standard Registration ratios for Cancer in the County of Durham show higher registration of stomach and lung cancer for both males and females and digestive cancer amongst males compared to the national rates.

Mental health problems are a major cause of morbidity within the community. Comparison to regional and national rates suggests that hospital admissions for affective disorders are consistently higher in County Durham. Affective disorders are those associated with severe disturbance in mood, very often accompanied by delusions, hallucinations, disorders in perception and behaviour etc (Woodhouse *et al.* 1997).

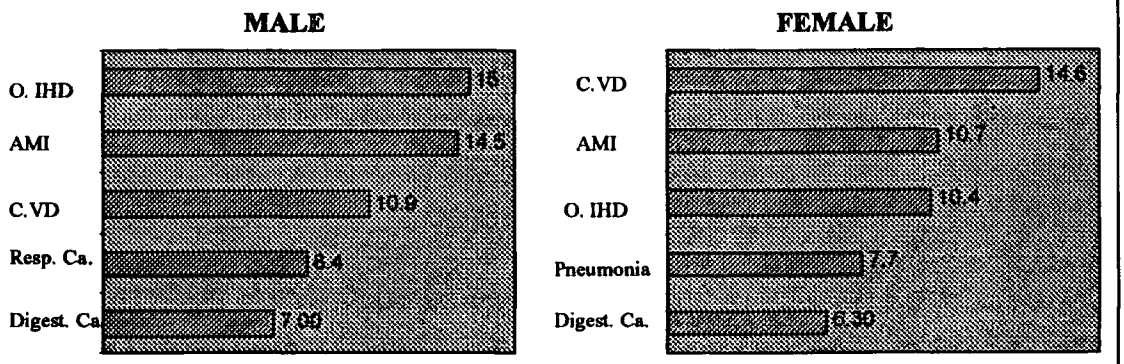
One of the *Health of the Nation* targets was to reduce the rate of conceptions among the under 16s by at least 50% by the year 2000 (Department of Health, 1992). The rate of conceptions in Locality B at ages 11- 15 during 1992-94 was 14.1 per 1000, the highest within the county (11.5 average for County of Durham and 8.3 for E&W).

The termination of an unwanted pregnancy could be considered, in the context of the health of the women, a cause of ill-health that can be avoided (Woodhouse *et al.* 1997). Across all age groups termination rates in County of Durham are lower than both the regional and national rates. This does mask differences between age groups. The termination rate for women under 20 is higher than both regional and national rates.

4.5. Mortality

Acute myocardial infarction, other ischaemic heart disease and cerebrovascular disease are the three main causes of death for both males and females across the County. Figure 1 illustrates the five major causes of death in the area.

Figure 4. 1. The five major causes of death in County Durham in 1995.
Figures represent percentages over the total no. of deaths.



O. IHD :other Ischaemic Heart Disease ; AMI :Acute Myocardial Infarction ; Ce.VD :Cerebro Vascular Disease ; Resp. Ca :Cancer of trachea, bronchus and lung ; Digest. Ca : cancer of the digestive organs and peritoneum.

(Woodhouse *et al.* 1997)

In County Durham, 4 in 10 people die of circulatory disease, heart disease or stroke. Those diseases are influenced by alcohol, smoking, high fat diet, high blood pressure and lack of exercise (Dawber, 1980; Pooling Project Research Group, 1978). Comparative figures of local *vs.* national lifestyle factors will be discussed in chapter 6.

Smoking is also clearly associated with respiratory tract cancer which causes a large number of deaths (Bartecchi *et al.*, 1994). Low vegetable and fruit intakes are implicated in some forms of digestive tract cancer (La Vecchia & Tavani, 1998). All these suggest that the main causes of death in the county can be prevented by improving these areas of lifestyles. Promoting positive health and well-being is therefore needed.

4.6. Summary

The population of the district in which the surgery is located is 100,106. Comparison with national figures reveals higher proportions of social classes III, IV, and V and higher unemployment rate. Population projections suggest that in the near future the percentage of people over 85 is going to increase largely.

Current morbidity and mortality health trends of the area are influenced by lifestyles. Health promotion appears to be necessary to the health of this population.

Chapter 5

Non-Participant Observation

5.1. Introduction

Non-participant observation was considered an appropriate tool to investigate how community nurses provide health promotion in a natural setting. The observation was carried out using an ethnographic approach. As a non-participant observer, the author was sitting at a side of the room, nearby the patient and the nurse, observing the activities in action and the interaction between them. Field notes were analysed using the grounded theory approach.

This chapter is divided into five parts. Firstly, it will present the characteristics of the sessions observed. Secondly, an analysis of the different ways of promoting health in surgery "A" will be provided. The third part will deal with topics raised during the observations. Following that, it will suggest which approach of each of the models described in chapter one describes the practice better. To end the chapter, suggestions are given on what else could have been done, from a health promotion point of view.

5.2. Sample

A total of 75[2] sessions were observed. Sessions were engaged: 64 with the practice nurses, 3 with the district nurses and 8 with one general practitioner. The mean age of the patients attended was 46.5 years (SD± 20.7) 74 % of them were females, due to the number of family planning sessions observed and as shown in the following table, coupled with the fact that women tend to visit the surgery more often. Table 5.1 also presents the types of activities observed and the mean duration of the sessions.

Table 5. 1. Characteristics of the various activities observed.

Types of activities	No. of sessions observed	Gender of patients (% females)	Age of patients Mean (SD)	Min. Lasted Mean (SD)
General sessions				
Blood test	11	65	55.8 (16.6)	4.6 (1.3)
Blood pressure	4	75	57.2 (8.1)	5.8 (2.5)
Ear syringing	5	69	40.2 (20.2)	11 (3.6)
HRT	4	100	49.7 (2.2)	5.7 (0.5)
Smear	9	100	37 (7)	12.8 (3.2)
Immunisation	9	75	42.2 (20.8)	6.7 (2.9)
New patient	2	50	32 (21.2)	9 (5.6)
Other	3	60	33 (7.4)	6 (3.2)
Family planning clinic	13	100	24.9 (10.7)	13.6 (6.5)
Diabetes clinic	8	66	64.3 (11.8)	12.7 (6.3)
Asthma clinic	4	75	16.7 (15.5)	9.2 (1.5)
Wound management Clinic	3	66	74.3 (5.1)	12.7 (2.5)
Total	75	100	46.5 (20.7)	9.1 (5.2)

5.3 Ways of promoting health

Health was found to be promoted through three different ways: printed materials, established clinics and opportunistically. An account of the activities observed illustrated with some examples is given below.

[2] One session constitutes one patient consultation.

5.3.1. Printed materials

Literature suggest that posters and leaflets in general practice waiting rooms can be effective means of giving health information (Bamgboye and Jarallah, 1994; Wicke *et al.* 1994). This form of dissemination of information was used in this practice.

While waiting for consultation or sitting in the nurse's room patients could see posters promoting healthy life styles for instance the image of a woman swimming encouraging frequent exercise. There were also maps with travel immunisation information and posters about sun protection. Other messages were directed to specific risk factors like: alcohol "think about drink" or tobacco "Smoking kills". Tertiary prevention posters to control and reduce certain diseases, like diabetes, were also in the consultation room.

Leaflets were displayed at the reception desk, in the waiting area and at the entrance of the practice nurses' room. They were published by the Health Education Authority or the Department of Health and covered a wide variety of topics as can be seen in table 2.

Table 5. 2. Leaflets promoting health in the GP Surgery called " A".

Topics	Supplied by
How to protect your skin from sun damage	Health Education Authority
Keep warm	Department of Health
Child immunisation	Health Education Authority
How to check for testicular cancer	Department of Health
Sexually transmitted Diseases	Health Education Authority
Cervical Screening	Health Education Authority
Travel immunisation	Department of Health
Self-breast examination	Health Education Authority

Leaflets were also given personally during the consultations. For example, the practice nurses gave leaflets on folic acid to those women who were planning to have a baby.

5.3.2. Established health promotion programmes/clinics.

Permission was given to observe 9 types of clinics or sessions in which a systematic protocol which included some health promotion was established, each of which will be briefly described.

1. Immunisation

Types of immunisation observed varied from travel immunisation, hepatitis B and tetanus vaccination. During travel immunisation sessions the patients received the necessary vaccinations using the WHO recommendations and advice about the precautions in the country of destination (not to drink tap water, for example). Solar precaution measures were also recommended.

2. Hormone replacement therapy

Patients taking hormone replacement therapy visit the practice nurse every six months. The protocol for this clinic includes the following activities: blood pressure, weight and height measurements; check that smear and mammography screenings are up to date and advice about breast self-examination. This protocol was followed to some extent in the four sessions observed. In some cases body mass index was not calculated during the consultation, consequently two patients having a BMI measurement higher than 30 kg/ m^2 (Ideal BMI: 20-25 kg/ m^2) did not receive health promotion advice. Dietary habits are very important in postmenopausal women, food rich in calcium and Vitamin D can help to prevent osteoporosis. However, those were investigated only in one out of the four sessions observed.

3. Ear syringing

Five sessions in which the patient needed to have ear wax removed were observed. The practice nurse gave health education on ear care. At the end of the procedure the nurse explained that ears have the ability to self clean and need wax for protection and patients were advised not to use cotton buds.

4. Smear

The Royal College of Nursing protocol for cervical screening underlines that good practice should encompass: giving accurate information and advice about the prevention of cervical cancer, making patients understand the impact of an abnormal smear, offering advice at all stages of the process and regularly updating individual practice (Royal College of Nursing, 1996).

As the guidelines suggest, all patients received counselling about breast self-examination. In addition, the blood pressure of every patient was measured. The nurse reiterated the importance of attending smear tests even if they were not sexually active at the time. She also explained the meaning of a positive result by saying that it is not a confirmation that the patient has cancer but that it is an indication of the need for further investigation.

Good screening practice also involves regular communication with the local laboratory. Once every three months the surgery receives a report on inadequate results from the lab. The practice nurse was proud of the results because their inadequate rate of smear is one of the smallest in the area, only 6/495.

On three occasions during the observation period the patient did not come to the smear appointment. The nurse explained then that all patients are asked to cancel the appointment if they are unable to come. To tackle the non-attendees, the surgery sends up to three reminders. After that, it is the patient's responsibility to book an appointment. Health promotion aims to empower individuals to make healthy choices, however, the principle of individual freedom has to be regarded.

5. Diabetes Clinic

This clinic is directed to all known diabetics patients registered in the practice and its aims are to increase the quality of life for the diabetic and the patient's awareness and understanding in order to improve the control of the condition.

During the sessions the nurse used a protocol developed by the surgery as a check list:

- to measure weight and height BMI
- Blood pressure
- Blood test-blood glucose, HbAlc or fructosamine, serum cholesterol and creatinine
- urine analysis or blood monitoring technique
- Current treatment.
- Incidence of Hypoglycaemia
- Check level of understanding
- Check last visit to the optician
- Last visit to the chiropodist
- Discuss diet and give appropriate education. Evaluate the need of dietary management with a state registered dietician
- tobacco consumption

(surgery protocols)

Eight diabetes clinic sessions were observed. The protocol was followed except in two areas. BMI was only calculated in half of the sessions, therefore, the nurse missed the opportunity to give advice in time. Smoking status although kept in the records, was not re-evaluated.

6. Asthma clinic

Four asthma clinic sessions were observed. The goals of this clinic were: to improve the quality of life for the patients with asthma; to reduce the incidence of acute asthma attack; to increase patients awareness and understanding in order to improve the control of chronic asthma; and to encourage a healthy lifestyle.

The practice nurse running the clinic had an Asthma Diploma. She followed a protocol developed by the Family Health Service Authority. During the session regarding to asthma, family history, trigger factors, current medication, weight, height and blood pressure were all measured. Advice to improve the inhaler technique and health promotion on how to use the medication was given. The technique was reinforced and the patients seemed to understand. Time was given to consult doubts or problems with the treatment.

Three of the patients attending the clinic were aged 11 to 13. Smoking status of the parents was recorded but not of the children themselves. In this surgery smoking status is recorded for patients over 15. However, there is evidence that

the proportion of those aged 11 to 15 who smoke regularly in England has risen from 8% in 1988 to 13% in 1996 (Lindsay, 1997). This suggests that patients over 11 should be asked about tobacco consumption especially if they are suffering from other conditions that already affect their respiratory system.

7. Family Planning Clinic

A total of 13 family planning sessions were observed. Eight of them were carried out by a general practitioner. Initially the researcher did not plan to observe activities performed by doctors, but the opportunity emerged and the sessions were included in the analyses for comparative purposes.

The reasons for attending the clinic were various: morning after pill (3), repeated prescription (2), problems with the present methods of contraception (6) and wanted to start with the pill (3). During the family planning sessions patients received health promotion information about folic acid and pre-pregnancy.

Two of the family clinic sessions are presented here for case study analysis:

> Case 1
>
> A sixteen years old girl came to the clinic with her school tutor. She wanted to start with the pill. The practice nurse asked a set of questions and found out that the girl had unprotected sex six weeks before and was two weeks late. A pregnancy test was recommended and booked for the next day. The practice nurse asked then what she would do if she was pregnant. Her tutor answered for her, "termination for sure, she is too young to have a baby".
> The practice nurse suggested to start on the pill in case she was not pregnant. Blood pressure, weight, height and smoking status were measured. The patient was a smoker but no health education was given. Before the patient left, the nurse reminded her: "it is your choice to have sex or not, even if you sometimes feel pressured, you should think about it carefully".
>
> Session 64

It is important to see that in a friendly manner the nurse reminded her to think carefully before having sexual intercourse. However, this girl came to the clinic after having unprotected sex and possibly being pregnant. The possibility of

referring her to a counsellor should have been taken into account. The nurse failed to give the advice about smoking especially knowing the positive interaction among smoking and oral contraceptives in the risk of cardiovascular problems. (WHO, 1997b). It is also very worrying that the tutor's statement suggested abortion as the only alternative. Having a child at sixteen can be considered a big problem, but one should forget the ethical implications and remember that it has to be personal decision.

> Case 2
>
> A sixteen year old girl came with her boyfriend to the family planning clinic. The clinic was run by a general practitioner. She wanted the morning after pill because the condom had split. The GP asked about the history of disease, checked blood pressure, weight, height and smoking status. She smoked but no comment or advice was given. Then the GP gave the prescription explaining how to take it, and also told her that there is a possibility of her becoming pregnant, asking her what she would do in this case. The patient did not know.
>
> The doctor gave her leaflets about contraception and folic acid in case of pregnancy. Before they left, the boy asked for condoms and the GP gave some to him.
>
> Once they left, the doctor asked me what I thought. I replied that I wondered whether it is good to let them go without any word of the risk and consequences of having sex at 16. GP answered, "I am not here to judge people, I am here to help them".
>
> Session 15

The US Preventive Task Force guide to prevent sexually transmitted diseases, states that a strong association has been found among the age of first sexual intercourse and the number of sexual partners the rest of the life (US Preventive Task Force, 1996). The need to change lifestyles has always been defended by health professionals. Advice to quit smoking or drinking with moderation is not considered a judgement. It should not turn into a taboo when talking about sexual life. The doctor should have found out the circumstances under which the condom split, do they know how to use it correctly? Did they consume alcohol? Alcohol

consumption has been found to be a factor in teenage pregnancy (Flanagan *et al.*, 1999; Walker *et al.* 1999)

8. New patient check

Two new patients joining the practice were observed. The practice developed a protocol according to which every new patient is asked about their lifestyles, immunisation records, personal and family history of disease. This data was imput in a computerised record system. Those two patients observed received health education advice about diet and exercise.

9. Wound Management Clinic

District nurses work mainly in home visiting, assessing the needs of the patient and family and monitoring the quality of care. They also run wound management clinics in the surgery. Three of these sessions were observed. The district nurse changed the dressings and kept records about the changes in the wound and treatment given.

5.3.3. Opportunistic health promotion

Activities grouped under this subheading were those in which the client came to the surgery for other purposes and the nurse used the opportunity to raise health promotion topics. During the 75 sessions observed 13 patients (17%) received health promotion opportunistically. To consider when opportunistic health promotion is needed it is essential to know what the patient's needs are. This was observed in practice,

> A 49 year old woman was referred from the general practitioner to the practice nurse to have a blood sample taken. She needed a hormone level test as part of menopause investigation. The practice nurse then initiated a conversation about breast cancer screening and asked her whether she did breast self-examination on a regular basis. The patient answered she did it "sometimes ". The nurse then took the opportunity to teach the procedure and explain to the patient the importance of doing it on a monthly basis.
>
> Session 24

This woman might have changed her attitude towards the importance of carrying out breast self-examination after this short meeting. Opportunistic health promotion has several advantages: cheapness, minimum disruptions to the established work routines and adaptability to individual circumstances (Naidoo and Wills, 1998: 147). Arguments against opportunistic health promotion question whether it is ethical, when a patient attends the surgery with a certain purpose, to screen or give advice about something else (Lupton, 1995). Respect for autonomy should always be present when doing health promotion. An example of this in practice was,

> A 47 year old woman came for the second dose of a Hepatitis B vaccination. Looking at her file the practice nurse realised that her smear test was overdue and offered to have the procedure carried out there and then. The patient refused by saying that it was not the right moment but she would book an appointment.
>
> Session 63

Generally it was the nurse who directed the conversation about healthy lifestyles or secondary prevention issues. On a few occasions the patients initiated the dialogue. For example,

> A 48 year old women attending a hormone replacement therapy check expressed her worries about the link between this treatment and breast cancer. The nurse explained to her although recent studies have suggested this link, the benefits of this therapy concerning osteoporosis and cardiovascular diseases justified the therapy. Nevertheless, she should carry out breast self-examination and attend the existing mammography programme to prevent breast cancer for women over 50.
>
> Session 52

Opportunistic health promotion requires a disciplined approach in recording the information and more time for booked consultations (Morrell, 1998). However,

once the information about their patients' habits and risks is collected, it is more likely that they can receive appropriate health promotion during the consultations.

5. 4. Topics raised

Three main topics appeared to emerge out of the field notes from the sessions observed and the conversations maintained with the nurses. These topics were: mental health, teenager pregnancy and ethical dilemmas about health promotion.

Several times during the consultations patients coming for other purposes dropped comments that referred to their mental health. This is reflected in the following statements,

> "I eat when I am stressed" (session 65)
> "I feel down in the dumps" (session 33; session 57)
> "I feel so gloomy" (session 61)

In one of these sessions (no. 61), the nurse tried to find the reasons why the patient was feeling "gloomy". The patient started to cry. " I lost me mum two months ago", she said. Talking about it, the nurse could find out that the patient had had "very negative thoughts". The nurse referred her to the Hospital counsellor. As a result of the extra time being spent with the patient, and the attention given to patient's untold worries, this person could have access to special treatment, which probably prevent major harm. The practice nurse expressed her concerns about how to deal with mental health problems:

> "... I don't have the time...I am not a counsellor... all I can do is refer them to the GP or the Hospital counsellor"

This comment illustrates the problems nurses might find supporting people with mental health problems. Depression and anxiety are becoming extremely common both in rural and urban areas (Department of Health, 1999b). Further training for practice nurses in the mental health area, particularly communication skills might be necessary.

During the observation period, several times, especially during the family planning clinic, the nurses talked about the problem of teenage pregnancy to the researcher. England has the highest teenage conception rate in Western Europe (Nicoll *et al.*, 1999). Talking about what the surgery could do to tackle this problem, practice nurse A. said

> "I don't know... but not in family planning, it is too late... perhaps school nursing, and try to find the balance between government aids and real needs"

Practice nurse H. also thought the Government help, in terms of child benefit, might be seen as an incentive to young girls to become pregnant. "Some young girls do want to get pregnant" she said, " it is like another option, such as studying or looking for a job...". H said she also worried about the future generations. She thought educated people have a very low birth rate, while those from lower social status, have higher birth and teenager pregnancy rates.

As noted before when talking about opportunist activities, health promotion presents dilemmas in practice. During the observation period, practice nurse H. expressed several times her concerns about the appropriateness of health promotion, especially in secondary prevention of cardiovascular diseases. H. asked:

> "should we do a cholesterol test?... I believe in some cases it is like a passport to keep on smoking".

The comments of Nurse H suggest the issue of the effect of health personal views/prejudices on health promotion. The problem arises because health promotion is based on a set of values which may not be shared by all. If clients make a choice that the professional considers is harmful, the health professional may be torn between the right to intervene or persuade people to a particular course of action. Respecting autonomy raises dilemmas for those involved in promoting health (Jones & Cribb, 1997).

5.5. Translating models into practice

Each of the four models described in Chapter 2, map different approaches that can be adopted when promoting health. One can use these models to have a better understanding of how health promotion is implemented in Surgery "A".

Ewles and Simnett model (1985) can be used to categorise health promotion in this practice according to the apparent aims. The activities observed seem to fit better in the "medical" and "behavioural change" approaches than in the "client-centred" or "societal" ones. It appears that Surgery "A" tends to improve ill-health which is a medical approach, and to encourage patients to adopt healthier lifestyles, which is behaviour change approach, rather than working with the clients in the clients' own terms, a client-centred approach, or trying to adopt a societal change approach by influencing the social environment.

Looking at the Tannahill model (Figure 2.1) the health promotion activities carried out in this surgery, e.g. screening, smoking advice or diet education, would be mainly included in the spheres of health education and prevention. No health policy activities were observed, however it seems unfair to expect any group of individuals to operate at all levels in health promotion. The clearest aspect of health promotion that can be distinguished within nursing, is health education

Tones' and colleagues' model (1990) presented three approaches: preventive, radical-political and self-empowerment. This practice would fit better in the preventive model trying to persuade individuals to take decisions that will prevent disease. These authors argue that it would be better to take a self-empowerment approach than persuade patients, health promoters would inform them so they can take their own decisions.

Finally, according to Beattie's model (1991), the kind of intervention in surgery "A" appeared to be more authoritative than negotiated. The following examples illustrate this,

Female patient 67 years old came to have a blood sample taken. Possible diabetes, under study. The practice nurse asked whether her diet was very sugary. To which the patients answered, "yes". The practice nurse said" try to cut down"

Session 67

Male, 59 years came for a cholesterol test. He is found to be a smoker. Practice nurse H. said, "you know you should quit"

Session 27

5.6. What alternatives can be adopted?

Health promotion is part of the work of the nurses in this surgery but the sessions observed suggest that opportunity is sometimes missed to find out about clients lifestyles and to empower them to improve their health.

Failure to introduce opportunistic advice or screening was more evident during technical procedures. For instance, in 12 out of 18 blood test sessions observed, the practice nurse limited her activity to a technical procedure, no surveillance of lifestyles or health education were given. Ear syringe sessions also are ideal situations for opportunistic surveillance of life styles and health education. Patients attending the surgery for this reason received health education on ear care but opportunistic screening of risk factors or advice to reach a healthy life style was not done.

In 4 sessions out of 7 in which the patient was found to be a smoker no advice was given. During the other three occasions the nurse recalled the patients the risks associated with smoking and encouraged the patient to quit. Screening of all patients for tobacco use status at each clinic visit and at least brief cessation advice to all smokers should have been done. The Guidelines for Smoking Cessation in Clinical practice say that this can have a significant system-wide effect (Jorenby and Fiore, 1999). Adding additional treatment components, such as pharmacotherapy, problem solving, and social support, can increase quit rates by twofold or more.

Alcohol consumption was only measured in 4% of the sessions observed. The last Health Survey for England (1997) revealed that 29% of men and 16% of women aged over 16, drink more than the recommended limits. However, if enquiries about alcohol consumption are not done systematically it is very unlikely that heavy drinkers receive the necessary advice.

Exercise. The last White Paper *Saving Lives: Our Healthier Nation* (Department of Health, 1999a) recommends 30 minutes of moderate exercise 5 times each week. During the observation period only 7 individuals were asked about physical activity and encouraged to exercise on a regular basis.

Family Planning Clinic. Three patients were smokers and were taking the pill. However, both the General practitioner and the practice nurse failed to give the advice about smoking especially knowing the positive interaction among smoking and oral contraceptives in the risk of cardiovascular problems (WHO, 1997b).

Men's Health Promotion. Twenty male patients attended the various clinics during the observation period. None of them was asked or received education about testicular self-examination. Results of the questionnaire sent to 516 patients of the surgery suggest that half of the men aged 17-45 do not carry out testicular self-examination and 32% of them were unaware of the need. Leaflets and additional education should be provided.

The above suggestions expressed what would be ideal, but in reality, nurses are constrained by the appointment system, might not be motivated or might have received a training based on curative aspects so that promoting positive health becomes a difficult task.

5.7. Summary

Nurses in this surgery were providing health promotion through three different ways: printed materials, established clinics and opportunistically. There is a tendency to adopt a medical approach centred on prevention of disease and specific risk rather than a self-empowerment approach centred in positive health which enable clients to make informed choice. Clients participating in a set up programme/clinic with a specific health promotion goal were more likely to receive life styles screening and health education. When the visit was not part of a set up clinic many opportunities to promote health were missed.

Chapter 6

Postal Survey

6.1. Introduction

This chapter presents the main outcome of the postal survey sent to 516 patients of a GP surgery in the North East, named "A", in February 1999.

The questionnaire was designed to achieve the following aims:

(i) to assess the health status and lifestyles of the practice population aged between 17-45 and in particular, to estimate the prevalence of risk factors associated with higher morbidity and mortality, such as smoking, obesity, alcohol consumption, poor nutrition and lack of physical activity

(ii) to find out which kind of health promotion information these patients have received from the surgery, especially from the practice nurses, district nurses and health visitors

(iii) to see whether the health promotion received meets the needs of these patients.

(iv) to investigate which kind of health promotion the patients would like to receive from the surgery

(v) to find out which are the main sources of health promotion information accessed by patients aged 17-45.

6.2 Survey response

As explained in the methodology section, the questionnaire was sent to a random sample of 516 subjects selected among the 3612 patients aged from 17 to 45 registered in this practice. From the 516 questionnaires initially sent, 21 were returned by the Post Office due to "addressee has gone away" or "addressee unknown". Out of 495 patients, 228 (46 %) replied within a month. Then a reminder was sent (appendix E). The final number of individuals included in this survey was 316. The response rate increased up to 63.8 %. Since the final response rate was lower than expected, the precision achieved for p=0.5 has decreased from 5% to 5.5%, which hardly affects the results.

In order to assess the representativeness of the results, the distribution per gender, age group and post-code of the respondents population was compared with that of the whole initial sample. As shown in Table 6.1 respondents' distribution by age groups was very similar to that in the whole sample. However, differences between gender were wider. Females were more likely to answer the questionnaire and the difference was statistically significant. This should be taken into consideration during the analysis of the results. All the variables have been compared by gender to see if the higher presence of women among the respondents affected the results.

Table 6.1. Differences between gender and age distribution among respondents and the whole sample.

	Respondents	All sample	χ^2 test (p value)
	% (N)	% (N)	
Gender			8.910 (0.03)*
Male	40.5 (128)	48.9 (252)	
Female	59.5 (188)	51.1 (264)	
Total	**100 (316)**	**100 (516)**	
Age group			2.600 (0.270)
17-25	17.4 (55)	20.2 (104)	
26-35	36.7 (116)	37.9 (196)	
36-45	45.9 (145)	41.8 (216)	
Total	**100 (316)**	**100 (516)**	

*p< 0.05

An examination of the Small Area Statistics for Wards in County Durham, suggests that post code areas, in this case, can be used as a proxy for social classes (OPCS, 1994). In this study, response rate post-code were compared to verify whether area of residence was an influencing factor. Figure 6.1 presents a map of the town divided into post-code areas and the respective response rates. Although people living in more deprived areas (south east of the town) presented lower response rates, differences were not statistically significant[1]. One can assume therefore that social classes, represented by post code areas, do not affect the response rate.

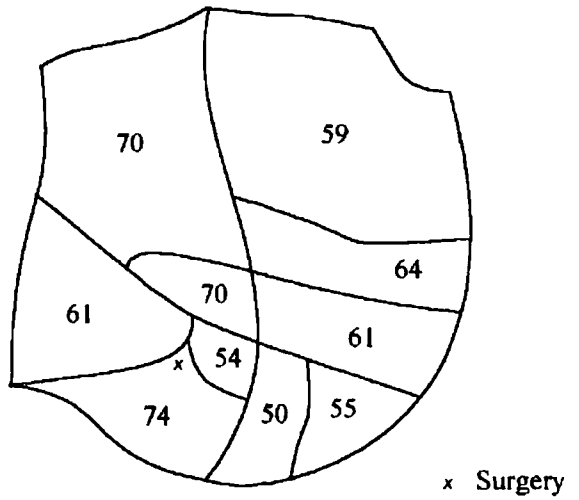


Figure 6.1. Response rate (%) by post code areas.

The questionnaire was divided into three areas: personal data, health status and lifestyles and health promotion issues. All the variables were compared by gender, age groups and social class. Open questions were codified into groups and analysed like qualitative nominal variables. Most relevant findings are presented in this chapter. The raw data obtained from of the questionnaire survey is provided in appendix G.

[1] χ^2 test revealed $p > 0.05$ in each of the postcode areas.

6.3. PERSONAL DATA

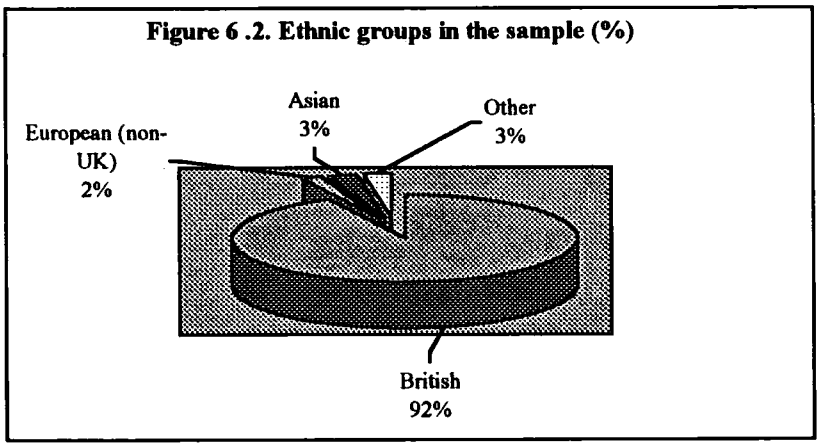
6.3.1. Gender and age distribution.

As stated before, the percentage of women answering the questionnaire, was higher (59.5% women *versus* 40.5% of men). As in the practice population, the subjects are not equally distributed by age. Most of the respondents were aged between 36 and 45, younger patients were less numerous in this sample.

6.3.2. Ethnic groups

Figure 6.2 illustrates the different ethnic groups in the sample. The majority of the subjects were British; other ethnic groups represented in the sample were Asian, European (non UK), African and Caribbean.

Figure 6 .2. Ethnic groups in the sample (%)



6.3.3. Family composition

Informants were asked about their marital status, number and age of children if any. 57 % of the respondents were married, 9.2 % divorced and 2.2 % separated. The mean number of children per family was 1.48 (SD±1.02). 19 % of the families have no children. Among the single population one in five have descendants.

6.3.4. Socio-economic characteristics

Two questions were addressed to investigate socio-economic status. Firstly informants were asked whether they were at school, in higher education, working full-time, working part-time, unemployed or other. Table 6.2 shows the employment status among men and women. Most of the men were working full-time compared to the women who were working mainly part-time. The unemployment rate was higher among the female group.

Table 6.2. Employment status by gender.

Men		Women	
	%		%
Full-time higher education	4	**Full-time higher education**	7.4
Working full time	76	**Working full time**	39
Working part-time	4	**Working part-time**	24.6
Unemployed	8.5	**Unemployed**	12.3
Long-term sickness	5.4	**Long-term sickness**	0
		Housewife	14.4
Other	1.5	**Other**	
Total (N)	*100 (128)*	*Total (N)*	*100 (187)*

Secondly, those who were in employment, were asked to describe their jobs. Those answers were coded according to the comprehensive index of 'job' tittles from the Office of Population Censuses and Surveys[2] (OPCS, 1995). Although this index presents everyday speech titles to refer to the work a person does, sometimes it was difficult to classify the respondents responses. A set of criteria was established to determine the occupational group:

- Because people tend to over describe their jobs, when doubts between two consecutive occupational groups appeared, the lower group was chosen.

[2] The Office for National Statistics introduced a new social classification system known as NS-SEC (National Statistic Socio-economic Classification), which has been adopted as the official class structure for the forthcoming 2001 census. The reason why this classification was not used in this study is that the author intended to compare the results with the previous census information (1991) which used the SOC classification.

- When trying to codify a job where there were doubts between more than two consecutive groups appeared, the subject was excluded from the occupational analysis.
- Replies were also excluded because of ambiguity or bad description.

Out of 225 individuals in employment, 9 replies were excluded due to the above mentioned criteria. The valid answers were classified into the Standard Occupational Classification.

The categories were as follows,

I Professional occupations (e.g. doctor, lawyer)

II Managerial and Technical occupations (e.g. nurse, teacher)

III Skilled occupations

(N) non-manual (e.g. secretary, shop assistant)

(M) manual (e.g. butcher, carpenter)

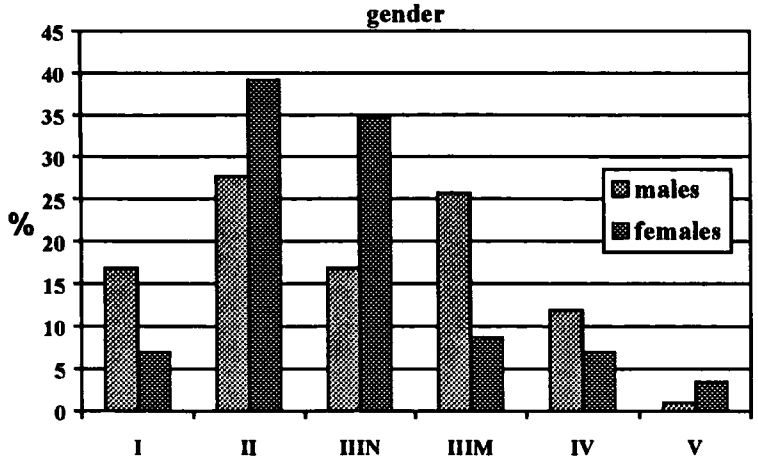
IV Partly skilled occupations (e.g. postman)

V Unskilled occupations (e.g. cleaner, labourer)

(Office of Population Censuses and Surveys, 1995)

Figure 6.3 presents the percentages of men and women in each occupational group.

Figure 6. 3. Standard Occupational Classification by gender



Women in employment were mainly doing managerial and non-manual skilled occupations. On the other hand, the men's occupation was more equally distributed. In general, very few respondents were doing unskilled jobs. These results were compared to those presented in the 1991 Census; County Report (OPCS, 1993a). Comparisons revealed important differences (table 6.3).

Table 6.3. Social class of those in employment in the sample compared to those in employment in District A.

	Males		Females	
	Respondents %	District A %	Respondents %	District A %
I Professional occupations	16.8	6.6	7	1.7
II Managerial and Technical occupation	27.7	26.8	39.1	24.1
IIIN Skilled occupation (non-manual)	16.8	11.1	34.8	40.9
IIIM Skilled occupation (manual)	25.7	34.5	8.7	6.5
IV Partly skilled occupations	11.9	15.5	7	16.3
V Unskilled occupation	1	5.4	3.5	10.4
Total	100	100	100	100
Bases	101	2220	115	1814

The percentage of individuals on professional and managerial occupations was consistently higher among the respondents. At the same time, the number of unskilled and partly skilled occupations was lower. These findings suggest that the patients of the surgery "A" or at least the respondents of this questionnaire represent upper social classes of the population. Lower social classes have been associated with higher levels of obesity, physical inactivity, smoking, drinking and poor diet (Department of Health, 1992; 1998a; 1999a). The unrepresentativeness of social classes IV and V in this sample might mask higher levels of unhealthy lifestyles among the population.

6.4. HEALTH STATUS AND LIFESTYLES

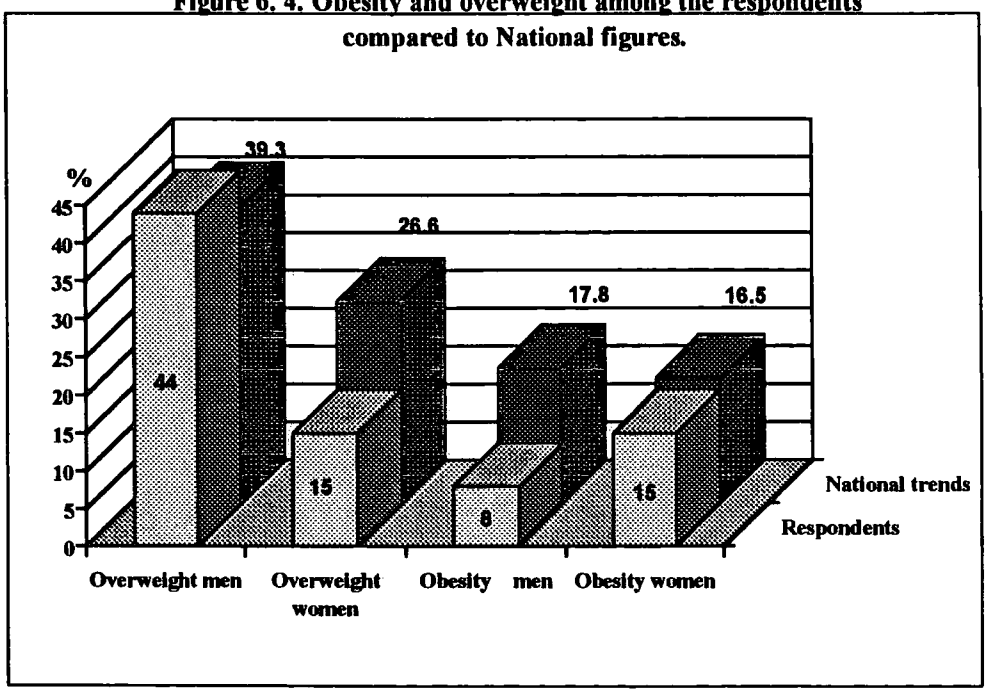
> Obesity, or overweight, together with smoking, stressful environment, excessive alcohol consumption and lack of physical activity form a group of lifestyle risk factors associated with increased morbidity and mortality from non-communicable diseases
>
> (WHO, 1996: http://www.who.int/ncd/feat190e.htm)

6.4.1.BMI

In order to identify the extent of overweight in adults, the WHO expert committee on Physical Status proposed the so-called Body Mass Index (kg/m2). For adults, four groups are defined according to their BMI, namely underweight (under 20 kg/m^2), desirable weight (20 to 25 kg/m^2), overweight (25 to 30 kg/m^2) and obese (over 30 kg/m^2).

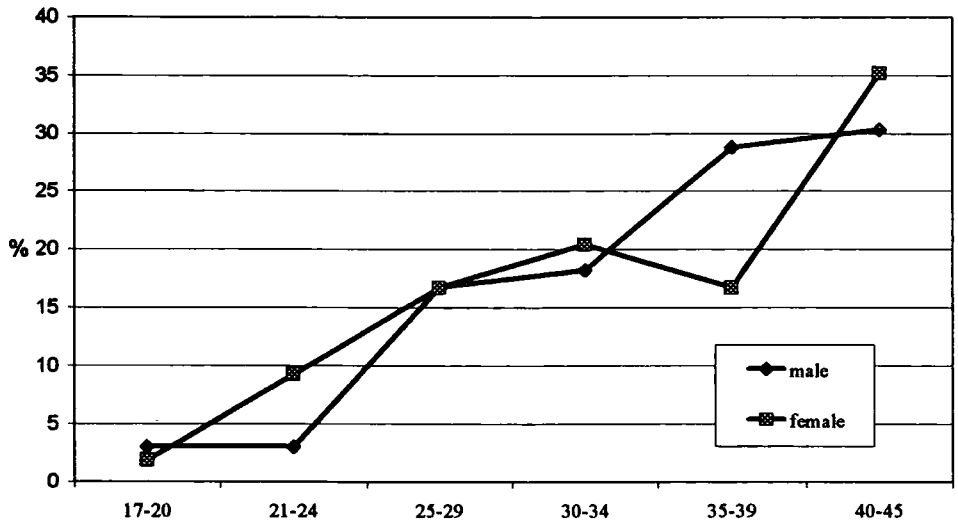
It is estimated that the prevalence of obesity in Europe is in the order of 10-20% in men and 15-25% in adult women (Seidell and Flegal, 1997). In the present survey, 44% of the men and 15% of the women were overweight and 8% of men and 15% of women were obese. In figure 6.4 these percentages can be compared to the national figures (Department of Health, 1998a)

Figure 6. 4. Obesity and overweight among the respondents compared to National figures.



Compared to the national figures, patients in the sample reported lower levels of BMI. Only the percentage of overweight men was higher.

Figure 5. BMI > 25 kg/m2 per age groups



The percentage of obese and overweighed appeared to increase with age. As can be seen in figure 6.5, the percentage of patients reporting BMI higher than 25kg/m^2 among the youngest is very low, while over forty 35% of the women and 30% of the men were either overweighed or obese.

It is important to bear in mind that self-reported measurement is frequently biased. People tend to underestimate their weight and over-report their height (Kuskowska-Wolk *et al.*, 1989) so the real prevalence of obesity among this sample may be even higher.

6.4.2. Physical activity

Physical activity on a regular basis provides strong protection against coronary heart disease and stroke (Sanvik *et al.*, 1993; Lakka *et al.*, 1994). It also has beneficial effects on weight control, blood pressure and diabetes (Lehmann *et al.*, 1997). Exercise protects against osteoporosis and increases

general sense of well being (McMurdo, 1997). According to the Canadian Task Force on Preventive Health Care, there is fair[3] evidence to recommend individuals carry out 30 minutes or more of moderate intensity physical activity[4] most days of the week (Beaulieu, 1994).

The White Paper *Saving lives: Our Healthier Nation* recalls the side effects of sedentary lifestyles,

> By not doing the recommended levels of physical activity-30 minutes of moderate exercise 5 times each week- you are at:
> - twice the risk of getting coronary heart disease
> - three times the risk of suffering a stroke.
>
> (Department of Health, 1999: 25)

Patients were asked to report on the frequency of exercise they do. Half of the respondents were exercising very often/often; 44 % were doing physical activity occasionally and 7 % not at all. The rate of people who did not exercise at all was higher among men aged 36-45 (16.7 %)

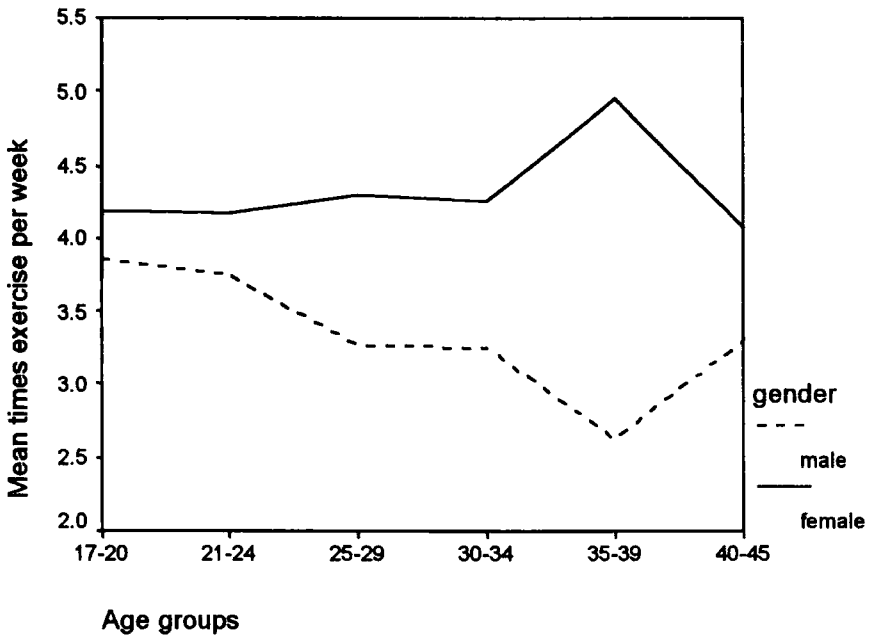
Figure 6.6 presents the mean number of times women and men exercise per week. As can be seen, women exercise more often than men do. The difference grows between patients aged 30 to 45. Men, especially in older age groups, were far from accomplishing the Government recommendations of exercise at least 5 times each week.

---

[3] The Canadian Task Force of Preventive Health Care develops guidelines from rigorously evaluated medical research evidence and divides its recommendations into good evidence, fair evidence and poor evidence to support the recommendation of inclusion or exclusion of a determined intervention in a periodic health examination. (CTFPH, at http://www.ctfphc.org/ . See methodology section. Last consulted 14/5/99).

[4] The following are considered moderate intensity physical activities (above 4.5 Mets): normal walking, golfing on foot, slow biking, raking leaves, cleaning windows, slow dancing, light restaurant work, etc.

Figure 6.6 Mean times exercise per week



When asking about the kind of exercise, the most common activities reported by the patients were walking, going to the gym and swimming. (See table 6.4) Open questions have lower response rates. Twelve per cent of the informants failed to detail the type of exercise and number of times they exercise per week.

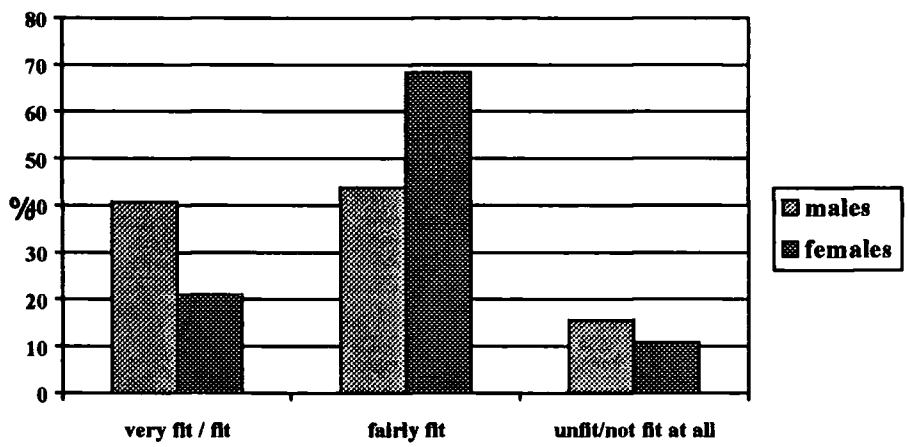
Table 6.4. Types of exercise

	N	%
Walking	142	44.9
Gym	67	21.2
Swimming	44	13.9
Aerobics	31	9.8
Running	28	8.7
Cycling	21	6.6
Football	18	5.7
Circuit training	10	32
Badminton	7	2.2

6.4.3. Fitness

Fitness can be defined as "a state of well-being in which performance is optimal"(Crowther *et al.*, 1997:441). Informants were asked whether they considered themselves to be very fit, fit, fairly fit, unfit or not fit at all. Figure 6.7. represents the answers to this question. On average, women's self-perception of fitness was higher than men. Self-perception of fitness did not vary among the different age groups. Most of the respondents tended to describe themselves as being fairly fit.

Figure 6. 7. Fitness self-perception



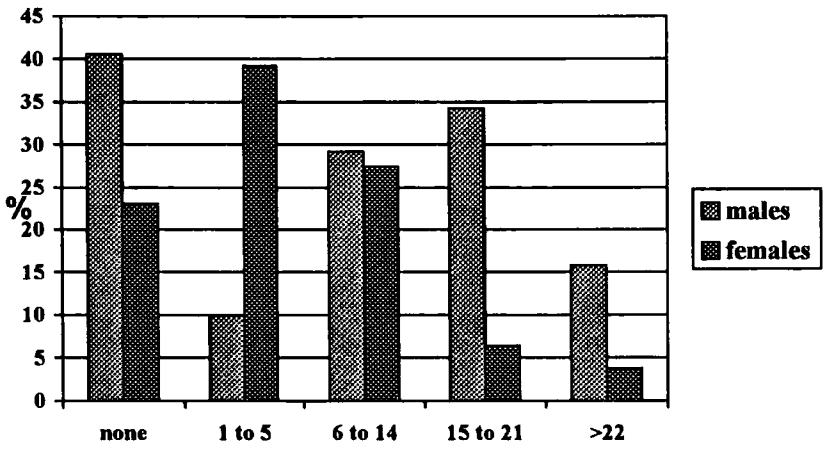
6.3.4. Alcohol consumption

Alcohol consumption is a major cause of premature death and avoidable ill health in the United Kingdom. The harms related to alcohol consumption are many and act at both population and individual levels. As well as directly causing illness, such as cirrhosis of the liver, alcohol contributes to certain cancers and to stroke (Department of Health, 1995). Its misuse results in domestic violence, mental illness and family break-up. It is also a factor in many accidents.

Sensible Drinking, the last government's report about alcohol consumption, states that drinking less than 21 units[5] of alcohol per week for men and 14 units for women is "unlikely to damage health" (Department of Health, 1995:5).

The last Health Survey for England (1997) revealed that 29% of men and 16% of women aged over 16, drink more than the recommended limits. Figure 6.8 shows alcohol consumption level, by age and sex. As can be seen, in this study 21.2 % of the men and 10.6 % of the women consume more than 21 and 14 standard units of alcohol a week respectively. Looking through the different age groups, heavy drinking was higher between men aged 26-35. Once again, one should note that respondents tend to underestimate their drinking.

Figure 6. 8. Alcohol consumption: units per week



The analysis of the frequency of consumption suggests that alcohol tends to be used more during the weekends (see Table 6.5). Most of the respondents drinking alcohol, did so once or twice per week.

[5] One unit is defined as the equivalent of 8 g pure ethanol.

Table 6.5. Alcohol consumption patterns (those who drink) by sex and age.

Men		Women	
	%		%
Once per week	31	Once per week	32.2
Twice per week	26.7	Twice per week	30.8
Three times per week	23.3	Three times per week	21.7
5 days per week	12.1	5 days per week	9.8
Every day	6.9	Every day	5.6
Total (N)	100 (116)		100(146)

6.4.5. Smoking

Smoking is the single greatest cause of avoidable illness and preventable ill health in the United Kingdom (Department of Health, 1998b). It is responsible for 84% of deaths from lung cancer, and 83% of deaths from chronic obstructive lung disease. Smoking causes 1 out of every 7 deaths from heart disease - 40,300 deaths a year in the UK from all circulatory diseases and it is also linked to many other serious conditions including asthma and osteoporosis (Callum, 1998).

The government has emphasised through different publications that cigarettes more than any other factor, cut people's life expectancy,

> - Half of all who continue to smoke for most of their lives die of the habit; a quarter before the age of 69, and a quarter in old age, at time when average life expectancy is 75 for men and nearly 80 for women
>
> (Department of Health, 1998b: 7)

> - For every 1,000 20-year old smokers it is estimated that one will be murdered and six will die in motor accidents, but 250 will die in middle age from smoking and another 250 will die in older age from smoking.
>
> (Department of Health, 1999a: 27)

According to the last *Health Survey for England* (Department of Health, 1998a), among people aged 16 and over, the smoking rate is 29 per cent in men and 27 per cent in woman. More and more children and young people are starting to smoke. According to Lindsey (1997), the proportion of those aged 11 to 15 who

smoke regularly has risen from 8 per cent in 1988 to 13 per cent in 1996. This trend is particularly notable among girls.

In the present study, one in four respondents was a smoker (see table 6.6). There were no big differences between genders or age groups. The highest smoking prevalence was found among the women aged 17-25, one in three were current smokers.

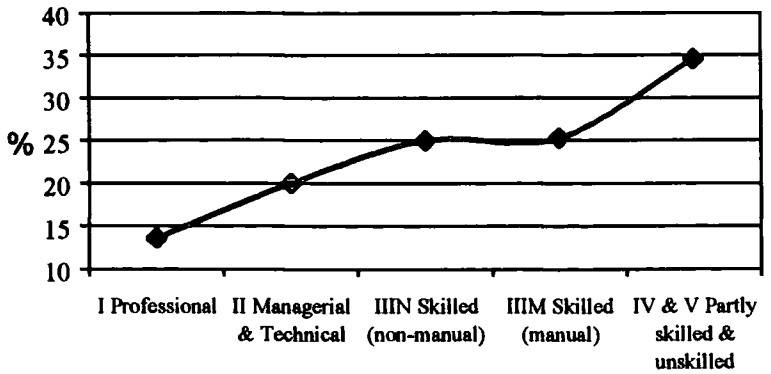
Table 6.6. Self-reported cigarette smoking status

Current smokers	17-25 %	26-35 %	36-45 %	All %
Men	22.2	26	25	25
Women	30.6	22.4	26.5	**25.8**
All	27.8	23.9	25.9	25.5
Bases (N)	55	116	145	316

The proportion of heavy smokers (20 or more cigarettes per day) was higher among males, one in three male smokers, compared to one in four female smokers.

Smoking appeared to be related to socio-economic status. Figure 6.9 highlights this link. Socio-economic groups IV and V have been linked because the limited number of patients in group V (6), would have disturbed the results.

Figure 6. 9. Smoking prevalence by socioeconomic groups



Almost 80 per cent of the women who smoke have tried to quit compared to 67 per cent of the men. Sixty three per cent of smokers wanted to receive help to quit the habit. This desire was more notable among the youngest, every three in four smokers aged between 17-45 wanted to receive help.

6.4.6. Diet

Good nutrition is central to health. It helps us to protect against a whole range of diseases including coronary heart disease, stroke, various cancers, high blood pressure and diabetes mellitus.

Poor diet contributes to about a quarter of cancer deaths in the United Kingdom (Department of Health, 1999: 63). Poor diet, containing too much fat and salt and not enough fruit and vegetables, is another important contribution of coronary heart disease and stroke.

Diet survey methodologies.

The assessment of diet has always been problematic. It is difficult to define what is considered a good diet and which is the best way to find out people's eating habits.

The methods most often used in nutritional epidemiology are:

- 24-hour recall. The respondent is asked to recall the actual food and drink consumed during the past 24 hours. It is relatively quick to carry out but does not estimate the habitual diet of individuals (Martinez-Gonzalez, 1999).

- Weighed record. A weighed record involves the subjects weighing all food and drink for a specific period of time. In epidemiological studies at least three days' data are required (Bingham, 1987).

- Food frequency questionnaire: the respondent is presented with a list of foods and is required to say how often each is eaten. It is normally used for large-scale epidemiological studies. Its main disadvantage is that food frequency questionnaires assess the items listed but not the total diet (Kemm and Booth, 1992).

- Diet History. The respondent is questioned about 'typical' or 'usual' food intake in a 1-2 hour interview. It requires trained interviewers.

Food frequency questionnaire was considered the most appropriate method. Easy and quick, it allows the researcher to concentrate on specific nutrients or foods relevant for this study. The use of an already validated food frequency questionnaire was considered. In doing so, it would have been possible to compare the results with those obtained in other studies. However, it was not possible to find an existing validated short food frequency questionnaire. This study covers a wide range of health aspects. Trying to investigate it all in depth would have resulted in a very long final questionnaire and may have influenced the non-respondent rates.

Therefore, an instrument was piloted to obtain information on a selected range of foods. The questionnaire presented a food-frequency table (see Appendix C) with 10 items, selected according to the Department of Health's Committee on Medical Aspects of Food Policy (COMA) recommendations.

The items and reasons why they were included are follows

- Fruit and vegetables.

The COMA's report on *Nutritional Aspects of Development of Cancer* (Department of Health, 1998c: 7) reported moderately consistent evidence that higher consumption of vegetables would reduce the risk of colorectal cancer and that higher fruit and vegetable consumption would reduce the

risk of gastric cancer. The evidence that relate fruit and vegetables consumption with reduced risk of breast cancer is weaker. The advice from this working group suggest increased fruit and vegetable consumption to at least five portions per day to achieve better health in general and to reduce risk of cancer in particular

-Fish.

According to the COMA's report on *Nutritional Aspects of Cardiovascular Disease* (Department of Health, 1994: 17), there is evidence that increasing intake of long chain n-3 PUFA (principally from oily fish) reduces risk of death from recurrent heart attacks and is reasonable to suppose a similar effect in relation to first heart attack. The committee recommended that people eat at least two portions of fish weekly.

-Fat.

Saturated fatty acids (principally from dairy and meat products and fat spreads) play an important role on the concentrations of plasma total and low density lipoprotein (LDL) cholesterol, and in the commensurate risk of coronary heart disease (CHD). Evidence suggests that the lower the intakes of saturated fats, the lower the risk of CVD. COMA recommend to use reduced fat spread and dairy products instead of full fat products (Department of Health, 1994:21)

- Red meat

The evidence indicates that the risk of colorectal cancer is greatest in people with the highest intakes of red and processed meat. The COMA Working Group on Nutritional Aspects of Development of Cancers, concluded that adults with intakes of red and processed meats greater that the current average (90g/day, cooked weight) should consider a reduction in the intake (Department of Health 1998c: 8)

- Add salt or eat salty foods.

Because of the evidence for the relationship between the consumption of sodium and the level of blood pressure, the COMA recommends a reduction in the average intake of common salt to about 5g in women and 7g in men. To reach this target, a reduction in the amount of salt added to foods by individuals in cooking or at the table would not be sufficient. Consequently a reduction in the amount of sodium from processed food is also necessary (Department of Health, 1994:12)

- Wholemeal Bread or cereals.

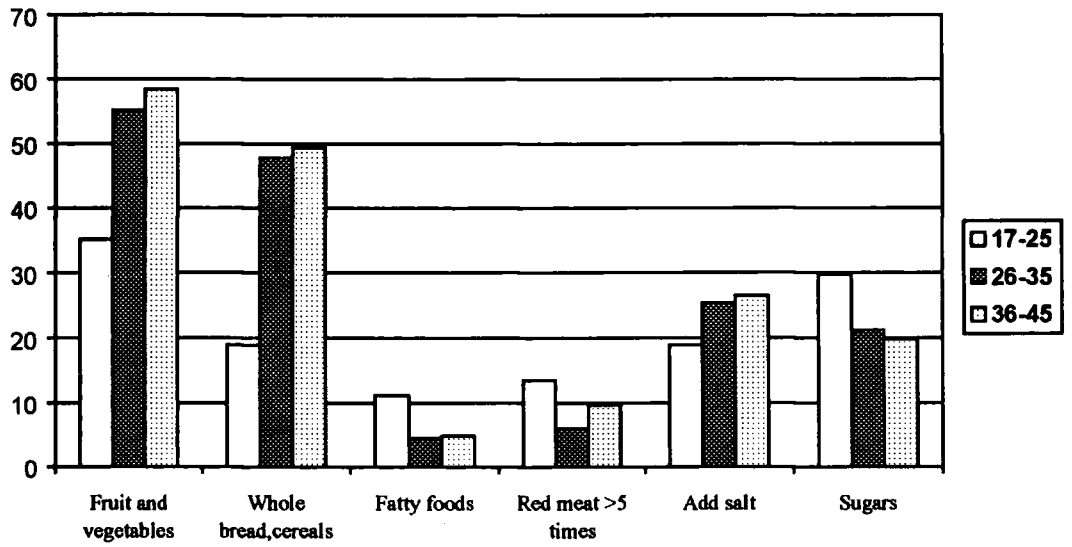
Complex carbohydrates should restore the energy deficit following a reduction in the dietary intake of fat. Dietary fibre from a variety of food sources would reduce the risk of colorectal cancer and pancreatic cancer.
The COMA *Panel on Dietary Reference Values* recommends an increase in average intake from dietary fibre from 12 g/day to 18g day (Department of Health, 1991).

-Sweets, cakes and soft drinks

Sugary foods and drinks are the most important dietary factor in the cause of dental caries. The COMA's report on *Dietary Sugars and Human Disease* recommends to decrease the consumption of non-milk extrinsic sugars, which at present constitute about 15 to 29 per cent of the average daily food energy supply in the UK (Department of Health, 1989b).

Figure 6.10 shows the proportion of patients eating some of these items daily by age groups. As can be seen adding salt and eating sugary foods daily was a common pattern in all age bands. Almost half of the respondents were not eating fruit and vegetables on a daily basis. The consumption of red meat in this sample appeared to be low. It seems that patients aged between 17-25 were least likely to follow the current recommendations. They were eating less fruit and cereals and more fat, sugars and red meat.

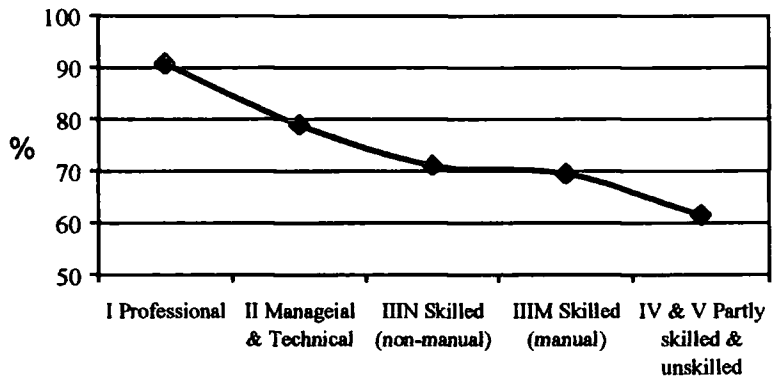
Figure 6. 10. Proportion of informants eating different types of food daily by age groups



Another link between ill-health and socio-economic group appeared when analysing diet habits. The intake of fatty food, red meat and sugary foods was higher among lower socio-economic groups. While healthy foods like fruits or vegetables were lower.

Figure 6.11 shows the relationship between the frequent intake of fruits and vegetables (at least 5 times per week) along the different socio-economic groups. Again groups IV and V have been clustered to avoid disruption due to the small sample.

Figure 6.11. Percentage of people eating fruits and vegetables daily by socioeconomic groups



6.4.7. Mental health

Mental Health is essential for individuals. It plays an important role in our relationships, work and daily activities. Mental illness brings distress and suffering to individuals and their families. People with mental illness can be socially excluded and have higher rates of substance abuse (Department of Health, 1996).

One of the main targets presented in the White Paper *Saving Lives: Our Healthier Nation* refers to mental health,

> Target: to reduce the death rate from suicide and undetermined injury by at least a fifth by 2010, saving up to 4,000 lives in total.
>
> (Department of Health, 1999: 95)

The same paper presents two worrying statements that justify this goal. One is the fact that in England, more than one person dies every two hours as a result of suicide. The other, that on average, family doctors identify only about half of the people who come to them with depression and anxiety.

In this survey three questions were related to mental health. Patients were asked how often they become anxious about things, whether they had had an episode of depression and how often they slept badly.

Figure 6. 12. Proportion of informants reporting having had an episode of depression

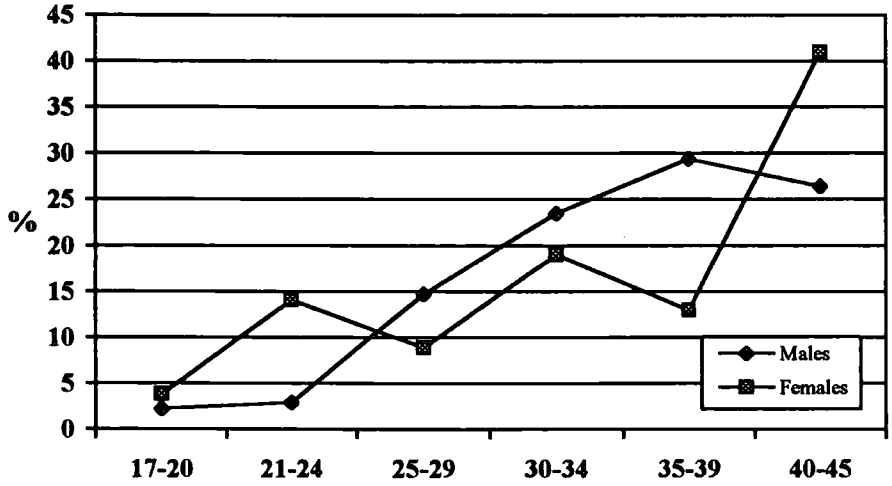
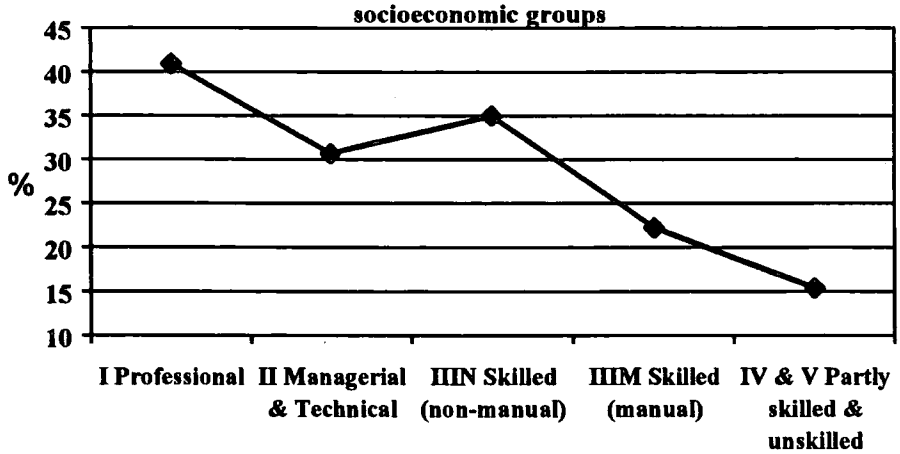


Figure 6. 13. Reported having had an episode of depression by socioeconomic groups



More than a third of the respondents reported having had an episode of depression. Figure 6.12 illustrates the percentage of patients reporting depression by age groups and gender. Because of the limited numbers, lines are nor very smooth, but one can appreciate that the likelihood of reporting

and episode of depression increases with the age. The differences between gender suggest that between 25 and 40 men report higher levels of depression while over forty years, depression levels among women are much higher.

Once again the fact that social factors also influence health can be appreciated in figure 6.13. However this time the relationship has changed, the percentage of people reporting having suffered an episode of depression is higher among upper socio-economic classes.

Anxiety levels were higher among women. One in two reported becoming anxious about things often/very often, compared to one in three men. The highest rate was among women aged between 35-45; 61 per cent of them said they become anxious very often/often.

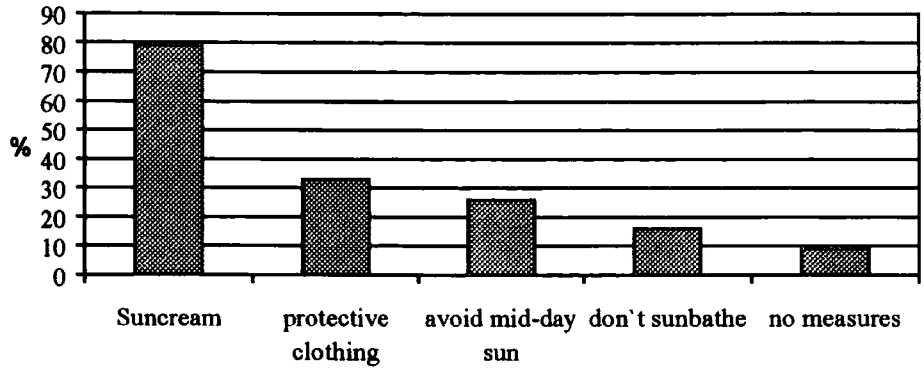
One in four informants reported often sleeping badly. This proportion was higher among women aged between 35-46 (one in four)

6.4.8. Sun protection behaviour

Over recent years the number of cases of skin cancer has been rising. A reduction in deaths from cancer is one of the four priority target areas chosen by the government in the White paper *Saving Lives: Our Healthier Nation.*

Figure 6.14 illustrates the main sun protection measures used by the respondents. The most widely used by far was sun cream, followed by protective clothing and avoiding mid-day sun.

Figure 6.14. Percentage of patients using different sun protection measurements.



The UK Skin Cancer Prevention Working Party (SCPWP) recommends using sun protection factor (SPF) 15 or higher (Department of Health, 1998a: 365). Those using sun cream were asked to detail the factor used on the face and on the body. The factor used on the face was normally higher. Only one in four informants were following the SCPWP guidelines.

6.4.9. Screening

Cervical Screening.

The cervical screening programme alone prevents up to 3900 cases of cancer each year in the UK (Department of Health, 1999b). Screening for premalignant changes in the uterine cervix should be undertaken from the age of about 20 years in sexually active women and repeated at three-yearly (Royal College of Nursing, 1996).

Women were asked about the time when their last cervical smear took place. Those who had not had one during the last three years were asked to explain why. Attendance rates for such procedure were high. Eighty six per cent of the women aged between 20-45 had had a cervical smear during the last three years. Table 6.7 shows the percentage of women who have not.

Due to the small number of subjects in these categories, it was difficult to group the reasons given about failing to attend the cervical screening programme.

Various examples were: "forgot to", "due for smear test now", "I am scared to wait for the result" or "no reason at all".

Table 6.7. Percentages of women between 20 and 45 who have not attended cervical screening for the last three years or never.

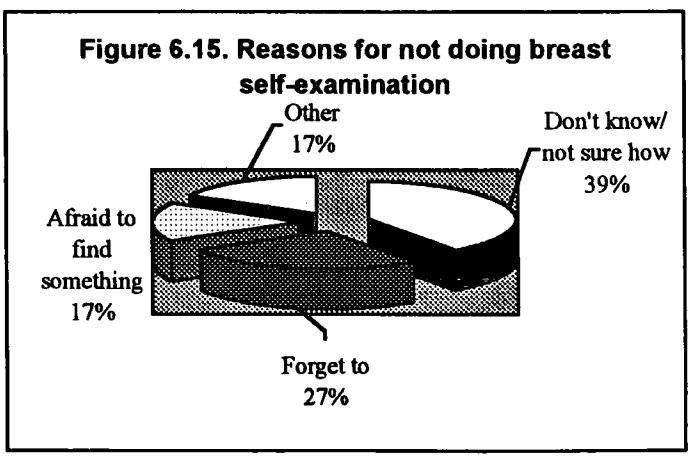
Last smear:	20-25 % (N)	26-35 % (N)	36-45 % (N)	All % (N)
> 3 years ago	8.7 (2)	9.2 (6)	13.8 (11)	11.4 (19)
Never had one	8.7 (2)	0	2.5 (2)	2.4 (4)
Total N	23	65	80	168

Breast self-examination

One in eleven women in Britain will develop breast cancer during their lifetime (Department of Health, 1999a). But if breast cancer is detected early, the chances are much better for effective treatment and extended survival. For women older than 20, breast self-examination once per month is recommended. Female patients were asked whether they perform breast self-examination. Those who did not were asked to explain why.

One in five female respondents did not perform breast self-examination. The main reasons were (see Figure 6.15) lack of knowledge about the facts, fears about the results and failing to remember.

Figure 6.15. Reasons for not doing breast self-examination



Testicular self-examination.

Testicular cancer, we are told, is the most common form of cancer in men aged between 15 and 45, and the risk of developing the condition has doubled in the past 20 years ("A message for the men" Department of Health campaign, 1997). This campaign advises all men to practice monthly testicular self-examination. Only half of the male respondents in this survey did testicular self-examination on a regular basis. This percentage increased by age groups from 35 among 17-25 to 57among the oldest.

Figure 6.16. Reasons for not doing testicular self-examination

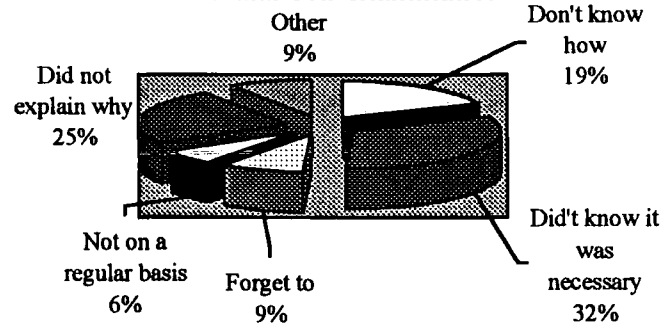


Figure 6.16 describes the main reasons why patients failed to do testicular self-examination. A third of them were not aware of the need, which suggests that more information about how to prevent testicular cancer should be provided to this practice population.

6.4.10.Self-reported health

One of the main goals of the study was to find out whether the health promotion provided by the practice met the needs of the clients. To give a fuller picture of the population under study and determine their needs, informants were asked whether they had any of the health problems listed in Table 6.8 or any other. Around sixty per cent of the informants had not had any health problems.

Table 6.8. Self-reported health problems

Health problems	%
Allergies	23.4
Stress	22.5
Weight problems	14.6
Depression	11.4
Digestive Problems	11.1
Asthma	10.1
Chronic Pain	4.4
Arthritis	4.1
Circulatory Problems	4.1
Cholesterol Problems	3.2
High Blood Pressure	2.2
Chronic Fatigue	1.6
Diabetes	1.6
Cancer	0.3
Multiple Sclerosis	0.3
Sexually transmitted diseases	0.3
Chronic Bronchitis	0
AIDS	0
Missing	4.4
Basis	*316*

Allergies together with stress were the most prevalent health problems. Depression, asthma, digestive and weight problems were also common conditions among the respondents. Comparison with national statistics of the top conditions listed in Table 6.8, reveals similar levels of morbidity. It has been estimated that in Britain 16% of the adult population suffers from a common mental disorder such as depression or anxiety (Department of Health, 1999a) At the same time, 17% of the men and 16% of women are obese (Department of Health, 1998a).The last report on *Morbidity Statistics from General Practice* revealed that 9% of the sample population consulted their doctors for diseases of the digestive system (McCormick *et al.*, 1995). Information of these conditions at a local level was not available.

It should be noted that the results presented are based on self-assessments of health. These are measures of informant's subjective views that would not necessarily correspond to medical diagnoses.

6.5. HEALTH PROMOTION ISSUES

The last part of the questionnaire tried to find out:

- Which kind of lifestyle advice the patients receive from the community nurses and what they would like to receive.
- which are the main sources of health promotion information among this age group.
- To what extent the patients agree with the statement "I am responsible for my own health"

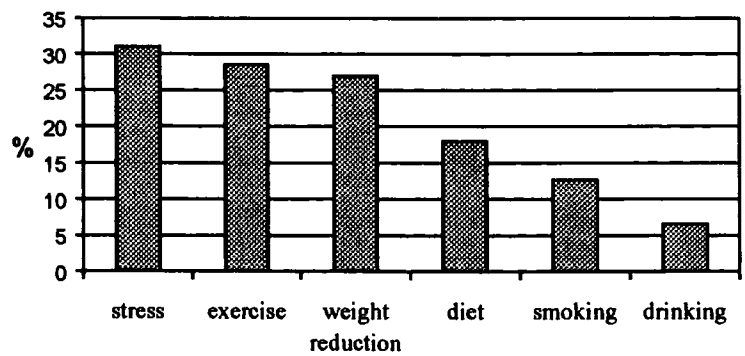
6.5.1. Lifestyle advice

Reports of having received advice from the practice nurse, the health visitor or the district nurse about smoking, alcohol consumption, exercise, diet, pre-pregnancy, stress and travel immunisation were measured.

For those who have consulted the nurse at least once during the last 3 years, the overall reported rate was 9.3% for travel immunisation, 8.1% for pre-pregnancy counselling, 6.1% for dietary information, 3.3 % for smoking, 1.9% for drinking and 1.4 % for stress. Those with unhealthy behaviour profiles received more advice- for example, 14.3% of smokers received advice on smoking. However, taking into account that 63% of the smokers want to receive help to quit, this figure can be considered very low.

The percentages of people interested in having more health promotion

Figure 6. 17. Percentage of patients interested in different kinds of health promotion information



information were relatively high (Figure 6.17). Stress together with exercise and weight reduction were the topics most selected.

6.5.2. Health Promotion Sources

When asked about the main sources of health promotion information, 65 % of the patients mentioned magazines. Television (45%) and relatives (21%) were also named. Health professionals had lower rates, 20% cited the doctor, 14 the chemist and only 5% of them referred to the community nurse.

Table 6. 9. Main sources of Health promotion information reported by gender/age.

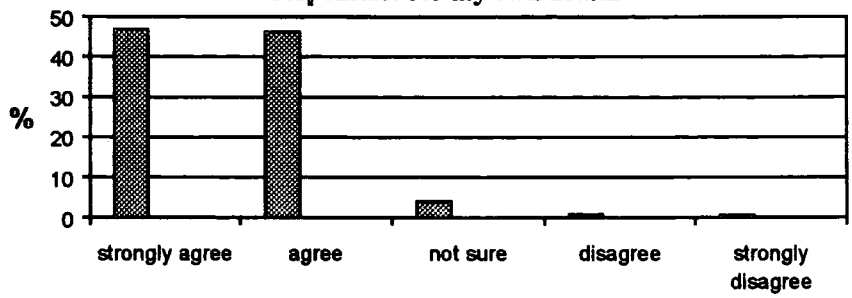
MEN			
	1st source	2nd source	3rd source
17-25	Magazines	TV	Relative
26-35	TV	Magazine	Relative
36-45	TV	Magazine	Doctor
WOMEN			
17-25	Magazines	TV	Relative
26-35	Magazines	TV	Relative
36-45	Magazine	TV	Doctor

6.5.3. "Responsible for my own health"

Any successful health promotion activity has to take into account how do people feel about health-related behaviours (Kemm & Close, 1995). To collect information about attitudes towards health, a Likert scale (Likert, 1952) was presented at the end of the questionnaire. Informants had to rate their agreement with the statement " I think I am directly responsible for my health".

Figure 6.18 presents the patients opinions. Most of them agree with the statement.

Figure 6. 18. Agreement with the statement "I think I am directly responsible for my own health"



6.6. Summary of the results

- 516 questionnaires were sent to a random sample of patients aged 17-45, from a GP surgery in the North East of England, named "A". A response rate of 63.8% was achieved.

- Differences among respondents and non-respondents were studied. Women were more likely to reply than men. (59.2 % of the respondents were female compared to 52,3 % expected; $p<0.05$). There were no significant differences between age groups (17-25, 26-35 and 36-45). Like the practice population, the percentage of respondents aged between 26 and 45 was higher.

- Body Mass Index. 44.4 % of men and 15% of women were overweight (25-30 kg/m^2) and 8% of men and 15% of women were obese (BMI> 30 kg/m^2).

- Exercise. 44% of the respondents exercised occasionally and 7% not at all. The mean times exercise per week was higher among women 4.3 times compared to 3.1 among men ($p< 0.005$). Walking, going to the gym and swimming were the most common activities reported by the patients.

- Self-perception of fitness. Most of the respondents described themselves as being fairly fit; 12% said there were not fit at all.

- Alcohol consumption. 21.2% of the men and 10.6% of the women consumed more than the 21 and 14 standard units of alcohol a week respectively.

- Cigarettes consumption. 25.5% of the respondents were smokers. The highest smoking prevalence was found among the women aged 17-25, one in three was a current smoker.

- Diet. 44 % of the respondents did not eat fruit or vegetables daily; 12% never eat wholemeal bread or wholegrain cereal; 20% eat sweets, cakes or soft drinks everyday and 28% add salt or eat salty food daily.

- Mental Health. One in two women reported becoming anxious about things often/very often compared to one in three men. 27% of men and 42% of women reported having had an episode of depression.

- Sun protection measurement. 90% of the respondents use sun protection measurements (like sun cream, protective clothing or avoiding mid-day sun). From the 80% of informants using sun cream, only one in four was following the UK Skin Cancer Prevention Working Party guidelines to use 15 sun protection factor or higher.

- 86% of the women aged 20-45 had had a cervical smear during the previous three years.

- 20% of the women over 20 did not carry out self-breast examination. The main reported reasons for that were lack of knowledge about the facts, fears about the results and failure to remember.

- Half of the men did not do testicular self-examination on a regular basis. 25% of them failed to explain why; 32% were unaware of the need, 19% didn't know how to do it and 9% forget to do it.

- Allergies (23%) together with stress (22.5 %), weight problems (14.6%), depression (11.4 %), digestive problems (11.1%) asthma (10.1%) were the main health problems reported by the subjects.

- Report of having received lifestyle advice from the community nurses was measured. The overall reported rate was 9.3% for travel immunisation, 8.1% for pre-pregnancy counselling, 6.1% for diet information, 3.3 % for smoking, 1.9% for drinking and 1.4 % for stress.

- When asking about which kind of health promotion information patients would like to receive, stress together with exercise and weight reduction were the topics more frequently selected.

- Magazines (65%), TV (45%) and relatives (20%) were the main sources of health promotion selected by the informants.

- Most of the respondents agreed with the statement " I think I am directly responsible for my own health"

Chapter 7

The interview

7.1. Introduction

The interview with the practice GP took place in August 1999, after the questionnaire and the non-participant observation notes had been analysed. This enabled the GP to make comments on the results. The interview was therefore used as a source of additional data and as a triangulation tool. It lasted for about three quarters of an hour and was tape recorded. At the same time the researcher was taking notes. In spite of the formal arrangements, the interview was friendly and relaxed. It was a semi-structured interview and the main topics covered can be seen in appendix F.

7.2. Findings

Dr. M has been a General Practitioner since 1986 and a GP Continuing Medical Education Tutor since 1991. Currently, apart from working in his practice, he is embarking on research into diagnosis and management of heart failure in primary care.

When asked about his views on health promotion Dr. M stated:

> "I think health promotion is very important. The main thing it should do is to help people to improve or look after their own health...it should encourage them to take responsibility for their own health and live a healthier life style"

It has been suggested that health promotion should be planned according to the local needs (Naidoo and Wills, 1998). However when enquiring about the characteristics and representativeness of their practice population, he explained that they do not keep those statistics but he thought: " it is fairly representative of the whole area except for the fact that they probably have higher proportions of social class II and I than most of the surgeries", which concurs with the findings of the questionnaire.

Talking about the kind of health promotion activities carried out in the practice, he confirmed what was concluded from the non-participant observation. He believed that they do more systematic health promotion in the clinics and that everybody does "some" opportunistic health promotion. Dr. M confirmed that,

> "I think there is a lot of opportunity missed. The main reason for that is time and that some times patients don't want to... but I think it is our role to promote it"

He raised an important issue to health promotion: the freedom of choice. Should health promoters persuade their clients? When do they have the right to intervene? People are allowed to choose and they may continue to smoke, to eat unhealthy things and health promotion should respect that. As noted in chapter 2 the role of the health promoters is to inform people so that they are aware of the risks which are associated with certain activities and they decide to whether they wish to take part or not. The Ottawa Charter (1986) emphasises health promotion as "empowerment" which is about developing people's consciousness of issues, and enable them to perform an informed choice.

Evidence-based practice has a considerable significance in medicine. There is pressure for their practice to be research based. He explained that as a practice they tried to follow evidence based practice especially secondary health prevention and that "nurses of the surgery are becoming more aware about that". In the UK evidence can be obtained through networks, national agencies or the reports from Centres for Evidence Based Medicine. Health professionals cannot

scan the huge amount of recent advances, but at the same time, these networks and the increasing access to computer data and database will hopefully help them to perform evidence based practice.

Referring to the issue of how government policies affect health promotion, specially the health promotion banding, he did not believe that financial incentives offered by the government do establish priorities, "there are just some payments that we get if we do the job". This is in contrast with other views which criticise the health promotion banding system for being too rigid and not encouraging planning of health promotion according to the local needs (Naidoo and Wills, 1998).

Dr. M was very optimistic about achieving the new government targets, about cancer, cardiovascular disease, mental health and accidents (Department of Health, 1999a). He thought there is already evidence that the prevalence of coronary disease, some cancers and accidents is on the decline. They were contributing as a practice, for instance, by reaching cervical smear and mammography targets or offering secondary prevention clinics for cardiovascular diseases. However he considered they could do more in helping people to stop smoking or having more counselling in stress management.

During the observation period some topics like teenager pregnancy or mental health appeared to concern the nurses from the practice. We talked about how Surgery "A" could contribute solving the crisis in teenager pregnancy. Dr. M thought that it is more a question of earlier education, especially at school, although as a practice they can also contribute. He explained,

> "You should take the opportunity. Because teenagers yes, they can be difficult but can also be impressionable and you need to catch them early.. You've got to take the opportunity but I think you've got to be careful how do you do it. Because if you say, no you shouldn't smoke and you shouldn't do...they won't come back ...But you have to try to get a balance ...so I think that's important"

Looking at the results of the questionnaire he expressed his concern about the fact that 32% of the respondents were not aware about the need of testicular self-examination. Dr. M: "because even if there is debate about how useful it is, I think men should always be aware of testicular tumours" he referred to that as a "neglected area". At the same time, looking at the number of women who have had a smear in the last three years (86%), he expressed his satisfaction saying that they were doing very well.

Dr. M was not surprised by mental health emerging as an important issue. This is reflected in the following statements:

> "I totally have this impression that stress is getting more and more"

> "I have this thought or a hypothesis, but it seems to be commoner to me in higher social class people, middle social classes especially. You can pick up groups like teachers... there are a lot of teachers with anxiety...I think that is a lot to do with the type of society. There is pressure on people all the time, and we may even see more of that"

> "Things like stress, you know, if there were good family networks.... I think there is different culture in here ... than in Spain or certainly, I think, in Cyprus[1] or Turkey, people support within their families much more than we do in Britain "

He also explained the ways they can deal with mental health problems. They can refer to community psychiatric nurses, to local support groups or offer anxiety relaxation management tapes through a loan service.

Dr. M was surprised by the fact that the vast majority of the respondents (94%) agreed to be responsible for their own health:

> "I think one of the reasons why we see more and more patients, is because they don't take enough responsibility for their own health. They want someone else to take care of them and sort them out. So it is interesting that they should say that "

[1] Dr. M. is originally from Cyprus.

The comment above could be interpreted as a victim blaming approach. The fact that individuals think they are responsible for their own health, should be seen as a great opportunity for health education. Health professionals should take a self-empowerment approach which enable individuals to make informed choices.

When asked about the plan for health promotion in the near future, Dr. M explained that the appointment system, is about to change. All staff in the surgery will hopefully get a minimum time appointment of 10 minutes. Another improvement is the introduction of a system with a stamp that certifies that with each person they have recorded certain things like BMI, blood pressure, smoking and alcohol consumption. Therefore, they will be able to create statistics for planning future services and give them to the national authority. But he also expressed his worries about how to measure the effectiveness of health promotion. He took the example of smoking cessation clinics and questioned how to measure that smokers have given up. "You would need cotinine saliva or things like that.... and I don't know if we have the time or the resources to go that far". Other studies have reported GP difficulties when trying to evaluate health promotion (Williams and Calnan, 1994). The difficulty of measuring health promotion' success, creates uncertainty towards its effectiveness.

7.3. Summary

The interview with one of the general practitioners of Surgery A gave some insights into the questionnaire and observation results. He explained that although they are aware of the importance of opportunistic health promotion, the actual system of appointments restricts the possibility of intervention. However, the appointment system is about to change. This, together with a new screening system will hopefully enable the practice to produce statistics and plan accordingly the patients needs.

Chapter 8

Discussion and conclusions

8.1 Methodology limitations

Before drawing conclusions about the findings one should consider the methodological limitations of this study.

One is the response rate of the postal questionnaire. The 179 patients who did not reply, might have felt embarrassed because of their lifestyles. Maybe they do smoke, drink in excess or do not take exercise. Moreover, the sample was not representative in terms of gender, women replied more than men.

The statistical analysis of the questionnaire results is merely descriptive to obtain an overview about the patients' needs. Due to the limited time scale of the study and the large amount of topics covered in the questionnaire, more in-depth investigation on the relationships between variables has not been carried out. Regression analysis would have been useful to identify confounding variables.

The observations were mainly focussed on practice nurses' work whereas the questionnaire investigated about the information received from health visitors, district nurses and practice nurses. This divergence made the triangulation of the results difficult.

The conclusions drawn in this study reflect the situation in a particular practice, wider generalisations cannot be established. In spite of these limitations, this study provides some evidence that can enable a GP practice to plan future services according to the client's needs.

8.2 Findings

Many issues have been highlighted in this study during the presentation of the results. Some of them are presented now for further discussion.

8.2.1 Is health promotion targeting the needs of the population?

Triangulation from the results obtained through the observation, postal questionnaire and semi-structured interview, suggest that health promotion in this practice could have a more targeted approach. The following paragraphs explain that:

Obesity and overweight

Half of the men and a third of the women who answered the questionnaire were either overweight or obese. However, during the non-participant observation, BMI index was not always calculated in the presence of the patient, therefore advice to reduce weight if necessary was not provided. Moreover, in the questionnaire, weight reduction was one of the most selected topics when asking about the health information needed. Evidence from the postal questionnaire and the observations suggest that more opportunistic health promotion on weight control can be done and that the possibility of weight reduction clinics should be considered.

Alcohol consumption

The levels of alcohol consumption identified as unlikely to harm the health of the population are 14 units weekly for women and 21 units weekly for men (Royal College of Physicians, 1987). Moderate alcohol consumption can bring enjoyment and relaxation and light alcohol consumption appeared to be associated with relatively low risk of cardiovascular disease (Rimm *et al.* 1991). However this message should not be widespread without qualification, it can be wrongly

interpreted; it is not uncommon to meet drinkers who excuse their habits by saying, " it's good for my heart". COMA on its report on *Nutritional Aspects of Cardiovascular Disease* does not recommend consumption of alcohol as a policy for cardiovascular heart disease prevention because the risk of adverse effects (Department of Health, 1994: 13).

In this study, 21.2% of the men and 10% of the women were consuming more than the upper limits established by the government. However, alcohol consumption was measured in only 4% of the sessions observed. These results are consistent with Deeham *et al.* findings (1998). They carried out a postal survey to explore the identification and management of alcohol misuse in 1852 general practices, concluding that the practice nurse is a major under-utilised resource for identifying patients drinking above the sensible limits and for providing brief interventions.

Smoking

During the non-participant observation, smoking status was recorded in 16% of the sessions[1]. Only 4 out of 7 patients found to be smokers during the observations received advice to quit. Looking at the questionnaire results, it seems that only 14.3 % of the smokers who have visited the surgery during the last 3 years have received health promotion from the nurses, encouraging them to quit the habit. 28% of the population aged 17-45 are smokers, 63% of them are willing to receive help. All these suggest that more emphasis should be place on smoking screening and smoking cessation clinics would be very welcomed by the patients of this surgery.

Smokers are aware of the dangers associated with smoking, as they are printed on every cigarette packet. However they still need more information on the benefits of stopping, practical tips on how to stop and support throughout the process of quitting. During the observation period four patients received advice to stop smoking, the type of advice given was "you know, you should quit". This kind of

message seems to be authoritative and victim blaming rather than negotiated and empowering. Alternative help should be offered. Advice should highlight the advantages of quitting instead of the risk of continuing smoking and try to transmit a positive message (Glynn & Manley, 1998) A normal consultation lasts 7 minutes and within this time it is not possible to give lot of advice. However, there is enough time for a brief intervention, which has been shown to be effective (Wilson *et al.*, 1992). More intensive forms of intervention such as counselling about methods to quit, negotiating a quit date and follow-up were infrequently utilised.

Diet

The results of the questionnaire suggest that there is a lot of room for health education encouraging individuals to improve their diet, for instance, 44% of the respondents were not following the recommendations of eating fruit and vegetables daily. Results from the questionnaire suggest a link between poor diet and socio-economic groups. Economic and social factors also determine health. Nurses should be aware of the socio-economic status of their patients in order to find out the better way to empower them to take the right choice. During the observation healthy diet was promoted in 13% of the sessions.

Mental health

Mental health is shown to be an important issue among this practice population. 23% of the respondents reported that they suffer from stress and 11.4% from depression at the moment the survey took place. Women seemed to be more affected by that, 42% of them reported having had an episode of depression. Anxiety, also appeared to be a common state: one in two women and one in three men reported becoming anxious about things often/ very often. Stress management was the most selected topic (30%) when asked about the kind of health promotion information they were willing to receive. During the interview Dr. M confirmed mental health to be an increasing problem.

[1] This result should be considered with caution. The records of the patients were not revised so it

8.2.2. Mass media role in health promotion.

The results from the postal questionnaire suggest that health professionals' advice has much less impact than that of the mass media. Magazines and TV appeared to be the main source of health promotion information for patients aged 17 to 45. Doctors were considered as a source of information in 14% of the patients and nurses only by 5%.

The role of the media in educating for health is crucial but it lacks of the potential for feedback and of interpersonal action. Moreover, mass media sometimes takes the most sensational part of the medical research and may mislead patients. There has been research suggesting that the health information provided in popular magazines is misleading or inaccurate (Gunderson- Warner *et al.*, 1990; Houn *et al.*, 1995; Marino and Gerlach, 1999). Efficient and accurate communication of the results of medical research is not always achieved. Doctors and nurses cannot afford the time or the resources to be "the main" source of information but should be an efficient one. The surgery can contribute by providing accurate magazines in the waiting rooms. Doctors and nurses can also assess the knowledge patients have about matters concerning their health and solve doubts that patients might present during the consultations.

8.2.3 Socio-economic determinants of health

Results from the questionnaire suggest a link between poorer health and people in the lower socio-economic groups, especially when looking at diet habits and smoking prevalence. These links have been found elsewhere (Townsend, 1982; Whitehead, 1987; Acheson, 1998).

The relationship between poverty and ill-health is very complex. Piachaud and Webb (1996) (as cited by James *et al.*, 1997) studied how low income affects diet. They found that few of the poorest families have access to a private car, but retailers have moved out of town. This has driven low-income families to shop

---

might be that smoking status was already measured during previous consultations

locally where food can be 30% more expensive. Leather (cited also by James *et al.* 1997) studied the food expenditure of the low socio-economic groups. Her findings suggested that they tend to buy foods high in fat and sugar which are much cheaper than foods rich in protective nutrients, like fruits and vegetables. The most effective action to tackle these inequalities is likely to be at a health policy level. In the case of the relationship between poor diet and low-income policies directed to improving access to supermarkets out of town, social services with food deliveries and policies to reduce the price of healthy foods might improve the situation.

Nurses working at primary care can feel powerless to influence this situation. However there are a variety of ways in which they can contribute. Naidoo and Wills (1998) suggest the following:

> - collecting data on how social and economic factors influence social health;
> - recognising ways in which interventions and services can exclude those on low income;
> - providing services which focus on client defined issues and needs.
>
> (Naidoo and Wills, 1998: 87)

It is very important that nurses understand how poverty affects their patients so that they avoid a victim blaming approach. It is unhelpful, for instance, to encourage patients to go to the gym or eat plenty of fruit when they cannot afford it.

8.2.4. Opportunistic health promotion versus health promotion clinics

Health promotion in this practice is done under specific programmes and also opportunistically. Opportunistic health promotion is unplanned but fitted into consultations or clinics when appropriate. The benefits from opportunistic health promotion have been cited in chapter 5: cheapness, minimum disruption to established work routines and adaptability to individual circumstances. (Naidoo, and Wills, 1998). To consider when it is appropriate for a patient to receive health

promotion in certain matters it is essential to know which are his/ her needs. Opportunistic health promotion demands more time for booked consultation and also a more disciplined approach to the recording of lifestyles.

On the other hand, health promotion clinics carry out better targeting to certain groups of the population. If there is a high prevalence of smokers among the practice population, smoking cessation clinics might contribute to reduce it more than advice on opportunistic basis. However, health promotion clinics have been criticised for reinforcing existing inequalities instead of promoting equity (Waller et al, 1990). Gillam found that the *inverse care law* applies to invitation for health clinics and that there was no direct correlation between the number of clinic sessions run and the measure of need (Gillam, 1992:56).

A better approach might be to combine opportunistic and established health promotion and take the benefits from both. Furthermore, there is no reason why they cannot go together, for example a practice nurse running an asthma clinic could give opportunistic advice on diet or exercise. Also the other way around, an opportunistic intervention could lead on to a referral to a specialist health education clinic, e.g. smoking cessation.

8. 3 Conclusions

This study explored the effectiveness of the health promotion activities carried out by community nurses in a general practice in the North East of England.

Methodological limitations of this study, such as the restricted response rate or the descriptive character of the analysis of the results, should be noted.

In Surgery "A" health promotion is carried out more in established clinics than on an opportunistic basis. However opportunistic health promotion appears to be a worthwhile practice due to its cheapness and wide scope. To achieve that, a more disciplined approach in recording factors that determine the health of the patients is needed. Practices should do community profiling through surveys, investigating

local perceptions and epidemiological data to allocate the health promotion clinics according to the local patient needs.

Trying to map the observed practice into theoretical models, the health promotion work carried out by nurses is mainly undertaken at specialist clinics, which focus on particular diseases such as diabetes or asthma. Inevitably, there is a risk that this work may focus principally on the management of illness rather than focussing on a model of health promotion which promotes health and wellbeing. It must be recognised that while the individual does have a distinct role to play in his or her own health, that the individual must also be considered within his or her social, cultural and economic context. An holistic approach to promoting health of the population must be multifactorial, acknowledging the influence of social, cultural, economic and biological factors as well as the role of the individual.

The questionnaire sent to 516 patients of the surgery, reveals unhealthy lifestyles among the population that can be tackled through health promotion, e.g. smoking, lack of exercise or unbalanced diet. Relatively low rate of lifestyle advice from the nurses, was reported by the patients. This, together with the fact that patients were interested in receiving more education in areas like stress management, exercise or smoking cessation, suggest that more emphasis should be placed on promoting health.

In surgery "A" changes are about to happen. A new appointment system, with a minimum of 10 minutes might help the nurses to carry out more opportunistic health promotion. A new recording system with a stamp to identify that lifestyles have been recorded will enable the practice to plan and offer services according to their clients needs. However, as mentioned before, health is not only determined by biological factors and lifestyles. It might be interesting to record housing, income or occupation status as well, in order to promote health in a broader sense.

This piece of research aimed to answer some questions, but at the same time it has raised others which might be interesting for future research:

The questionnaire covered a large amount of topics. The statistical analysis of its results was merely descriptive to obtain an overview about the patients' needs. Further investigation with regression analysis of the results can be useful to investigate better relationships between variables.

Patients in this surgery have reported TV and magazines to be the main sources of health information. Although only 2% of the respondents recalled the world wide web, this figure is very likely to increase in the future. Internet, magazines and other media might mislead the patients but they can also provide very good and accurate material in an interesting and empowering way. How can health promoters assist their clients to choose reliable sources of information?

Most of the respondents agreed that they are responsible for their health, however their lifestyles did not show a responsible attitude towards health. Which are the reasons for that? How can nurses working in primary care contribute to improve this picture? A holistic approach towards health promotion might be the solution. Most people know what they should do but they do not know how to change their lifestyle in specific circumstances. Health promotion should provide people with the ability and opportunity and power to change.

References

Acheson, D. (1998) *Independent Inquiry into Inequalities in Health Report.* London: HMSO.

Atkin, K. *et al.* (1994) The role and self-perceived training needs of nurses employed in general practice: observations from a national census of practice nurses in England and Wales. *Journal of Advance Nursing,* 20: 46-52.

Bamgboye, E., Jarallah, J. (1994) Long-waiting out patients: target audience for health education. *Patient Education and Counselling,* 23: 49-54.

Bartecchi, C., MacKenzie, T., Schrier, R. (1994) The human cost of tobacco use. *New England Journal of Medicine,* 330:907-12.

Beattie, A. (1991) Knowledge and control in health promotion: a test case for social policy and social theory. In Gabe, J., Calnan, M., Bury, M. (eds) *The Sociology of the Health Service.* London: Routledge.

Beaulieu, M. (1994) Physical activity counselling. In: *Canadian Task Force on the Periodic Health Examination. Canadian Guide to Clinical Preventive Health Care.* Ottawa: Health Canada: 560-69.

Bingham, S. (1987). The dietary assessment of individuals: methods, accuracy, new techniques and recommendations. *Nutrition Abstract and Reviews,* 57: 705-742.

Blaxter, M. (1990) *Health and Lifestyles.* London : Tavistock/Routledge.

Bowling, A. (1987) Practice nurses. The future role. *Nursing Times,* 83: 31-3.

Bradford, M., Winn, S. (1997) Practice nursing and health promotion: a case study. In: Sidell, M. *et al.* (eds) *Debates and Dilemmas in Promoting Health.* London: Macmillan Press.64-73.

Brinton, A. *et al.* (1998) Search for evidence of effective health promotion. *British Medical Journal,* 316:703.

Broadbent, J. (1998) Practice nurses and the effects of the new general practitioner contract in the British NHS: the advent of a professional project? National Health Service. *Social Science and Medicine,* 47:497-506.

Buton R., Macdonald, G. (1992) Health promotion: discipline or disciplines? In: *Health Promotion. Disciplines and Diversity.* Buton R., Macdonald, G. (eds). London: Routledge

Callum, C. (1998) *The UK Smoking Epidemic: Deaths in 1995.* London: Health Education Authority.

Calnan, M. *et al.* (1994) Involvement of the primary health care team in coronary heart disease prevention. *British Journal of General Practice,* 44: 224-8.

Campbell, N. *et al.* (1998) Secondary prevention clinics for coronary heart disease: randomised trial of effect on health. *British Medical Journal,* 316: 1434-7.

Cohen, L., Manion, L. (1980) *Research Methods in Education.* Fourth Edition. London: Routledge.

Crabtree, B., Miller, W. (1992) *Doing Qualitative Research.* London: SAGE.

Crowther, J., Kavanagh, K., Ashby, M. (eds) (1997) *Oxford Advanced Learner's Dictionary.* Oxford: Oxford University Press.

Dahl, R. (1995) The development of a community-based nursing practice: shifting the focus to health promotion. *Advanced Practice Nursing,* 1: 1-6.

Davis, S. (1995) An investigation into nurses' understanding of health education and health promotion within a neuro-rehabilitation setting. *Journal of Advanced Nursing,* 21: 951-9.

Dawber, T. (1980) *The Framingham Study. The Epidemiology of Arterioesclerotic Disease.* Cambridge: Harvard University Press.

Deeham, A. *et al.* (1998) Are practice nurses an unexplored resource in the identification and management of alcohol misuse? Results from a study on practice nurses in England and Wales. *Journal of Advanced Nursing.* 28: 592-597.

Department of Health (1989a) *General Practice in the National Health Service: a New Contract.* London: HMSO.

Department of Health (1989b) *Dietary Sugars and Human Disease. Report of the Panel on Dietary sugars, Committee on Medical Aspects of Food Policy.* (Report on Health and Social Subjects; No. 37) London: HMSO.

Department of Health (1991) *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom: Report of the Panel on Dietary Reference Values, Committee on Medical Aspects of Food Policy* (Report on Health and Social Subjects; No.41) London: HMSO.

Department of Health (1992) *The Health of the Nation. A Strategy for Health in England.* London: HSMO.

Department of Health (1994) *Nutritional Aspects of Cardiovascular Disease: Report of the Cardiovascular Review Group, Committee on Medical Aspects of Food Policy* (Report on Health and Social Subjects; No. 46) London: HMSO.

Department of Health (1995) *Sensible Drinking. The Report of an Inter-Departmental Working Group.* London: HMSO.

Department of Health (1996) *Health Related Behaviour. An epidemiological Overview.* London: HMSO.

Department of Health (1998a) *Health Survey for England.* London: HMSO.

Department of Health (1998b) *Smoking Kills. A White Paper on Tobacco.* London: The Stationery Office.

Department of Health (1998c) *Nutritional Aspects of Cardiovascular the Development of Cancer: Report of the Working Group on Diet and Cancer, Committee on Medical Aspects of Food Policy* (Report on Health and Social Subjects; No. 48) London: HMSO.

Department of Health (1999a) *Saving lives: Our Healthier Nation.* London: HMSO.

Department of Health (1999b) *Making a Difference.* London: HMSO.

Downie, R., Fyfe, C., Tannahill, A. (1990) *Health Promotion. Models and Values.* Oxford: Oxford University Press.

Doyle, Y., Thomas, P. (1996) Promoting health through primary care: challenges in taking a strategic approach. *Health Education Journal*, 55: 3-10.

Eggleston, J. *et al.* (1995) Who should give lifestyle advise in general practice and what factors influence attendance at health promotion clinics? Survey of patients' views. *British Journal of General Practice*, 45: 6669-671.

Ewles, L. Simnett, I. (1985) *Promoting Health: A Practical Guide to Health Education.* Chichester: Wiley.

Family Heart Study Group (1994) Randomised controlled trial evaluating cardiovascular screening and intervention in general practice. *British Medical Journal*, 308: 313-20.

Flanagan, P., Kokotailo, P. (1999) Adolescent pregnancy and substance use. *Clinics in Perinatology*, 26: 185-200.

Fontana, A., Frey J. (1994) Interviewing: the art of science. In: Denzin, N., Lincoln, Y., eds. *Handbook of Qualitative Research.* London: Sage.

Forcese, D., Richer, S. (1973) *Social Research Methods.* Englewood Cliffs, New Jersey: Prentice-Hall.

Gillam, S. (1992) Privation of health promotion clinics in relation to population need: another example of the inverse care law? *British Journal of General Practice.* 42: 54-56.

Glaser, B., Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago: Aldine.

Glynn, T., Manley, M. (1998) *How to Help Your Patients to Stop Smoking. A National Cancer Institute Manual for Physicians.* No. 98-3064.

Gudex, C. (1986) *QALYS and their Use by the Health Service: A Discussion Paper.* University of York Centre for Health Economics: 14.

Gunderson-Warner, S. *et al.* (1990) Critical review of articles regarding pregnancy exposures in popular magazines. *Teratology.* 42: 469-72.

Hammersley, M. (1990) *Reading Ethnographic Research: A Critical Guide.* New York: Longman.

Hammersley, M. Atkinson, P. (1983) *Ethnography Principles in Practice.* London: Tavistock.

Hockey, L. (1984) Is the practice nurse a good idea? *Journal of the Royal College of General Practitioners,* 34: 102-103.

Houn, F. *et al.* (1995) The association between alcohol and breast cancer: popular press coverage of research. *American Journal of Public Health* 85, 1082-6.

Hunt, S., McEwen, J., McKenna, S. (1985) Measuring health status: a new tool for clinicians and epidemiologists. *Journal of Royal College of General Practitioner,* 35: 185-188.

Imperial Cancer Research Fund OXCHECK Study Group (1995) Effectiveness of health checks conducted by nurses in primary care: final results of the OXCHECK study. *British Medical Journal,* 310: 703.

James, W. *et al.* (1997) Socio-economic determinants of health: The contribution of nutrition to inequalities in health. *British Medical Journal,* 314: 1545.

Jones, L. (1997) Exploring health promotion. In: Katz, J., Peberdy, A. (eds) *Promoting Health: Knowledge and Practice*. Milton Keyne: Open University Press.

Jones, L., Cribb, A. (1997) Ethical issues in health promotion. In: Katz, J., Peberdy, A. (eds) *Promoting Health: Knowledge and Practice*. Milton Keyne: Open University Press.

Jorenby, D., Fiore, M. (1999) The agency for health care policy and research smoking cessation clinical practice guideline: basics and beyond. *Primary Care*, 26: 513-528.

Kelinger, F. (1986) *Foundations of Behavioural Research.* Third edition, International edition. Oregon: Harcourt Brace.

Kemm, J., Booth, D. (1992) *Promotion of Healthier Eating. How to Collect and Use Information for Planning and Evaluation*. London: HMSO.

Kemm, J., Close, A. (1995) *Health Promotion Theory & Practice*. London: Macmillan Press.

King, P. (1994) Health promotion: the emerging frontier in nursing. *Journal of Advanced Nursing*, 20: 209-218.

Kuskowska-Wolk, A. *et al.* (1989) The predictive validity of body mass index based on self-reported weight and height. *International Journal of Obesity*, 13: 441-53.

Lakka, T. *et al.* (1994) Relation of leisure-time physical activity and cardiorespiratory fitness to the risk of acute myocardial infarction. *New England Journal of Medicine*, 330:1549-54

Lalonde, M. (1974) *A New Perspective on the Health of the Canadians.* Ottawa: Ministry of Supply and Services.

Langham, S. *et al.* (1996) Costs and cost effectiveness of health checks conducted by nurses in primary care: the Oxcheck study. *British Medical Journal,* 312:1265-8.

Last, J. (1988) *A Dictionary of Epidemiology.* Oxford: Oxford University Press.

La Vecchia, C., Tavani, A. (1998) Fruit and vegetables, and human cancer. *European Journal of Cancer Prevention*,7:3-8.

Le Touze, S., Calnan, M. (1996) Health Promotion in general practice: the views of the staff. *Nursing Times*, 92: 32-3.

Learmonth, A., Cheung, P. (1999) Evidence-based health promotion - the contribution of social science research. *International Journal of Health Promotion and Education*, 37: 11-15.

Lehmann, R. *et al.* (1997) Impact of physical activity on cardiovascular risk factors in IDDM. *Diabetes Care*, 20:1603-11.

Likert, R. (1952) A technique for the development of attitude scales. *Educational and Psychological Measurement*, 12, 313-15.

Lilienfield, D. (1980) *Foundations of Epidemiology.* New York: Oxford University Press.

Lindsey, J. (1997) *Smoking among Secondary School Children in 1996: England.* London: The Stationery Office.

Lupton, D. (1995) *The Imperative of Health: Public Health and the Regulated Body*. London: Sage.

Macdonald, G., Veen, C., Tones, K. (1996) Evidence for success in health promotion: suggestions for improvement. *Health Education Research*, 11: 367-376.

Marino, C., Gerlach, K. (1999) An analysis of breast cancer coverage in selected women's magazines, 1987-1995. *American Journal of Health Promotion*, 13: 163-70.

Martínez-González, M., Guillén, F. (1999) *Estilos de Vida y Salud Pública.* Pamplona: Digitalia.

Martínez-González, M., Ruiz-Canela, M., León, A. (1997) Estimación del tamaño muestral. In: Martínez-González (ed) *Bioestadística.* Pamplona: Digitalia.

May, T. (1997) *Social Research: Issues, Methods and Process.* 2nd ed. Buckingham: Open University Press.

Mays, N., Pope, C. (1995) Observational methods in health care settings. *British Medical Journal*, 315: 182-4.

McMurdo, M. (1997) Physical activity and health in old age. *Scottish Medical Journal*, 42: 154-5.

McCormick, A., Fleming, D., Charlton, J. (1995) *Morbidity Statistics from General Practice. Fourth National Study: 1991-1992*. London: HMSO.

Morrell, D. (1988) *Epidemiology in General Practice*. Oxford: Oxford University Press.

Naidoo, J., Wills, J. (1994) *Health Promotion. Foundations for Practice.* London: Bailliere Tindall.

Naidoo, J., Wills, J. (1998) *Practicing Health Promotion. Dilemmas and Challenges.* London: Bailliere Tindall.

Nicoll, A., *et al.* (1999) Sexual health of teenagers in England and Wales: analysis of national data. *British Medical Journal*, 318: 1321.

Norton, L. (1998) Health promotion and health education: what role should the nurse adopt in practice? *Journal of Advanced Nursing*, 28:1269-75.

Norusis, M. (1998) *SPSS 8.0 Guide to Data Analysis.* Upper Saddle River, N.J.: Prentice Hall.

OPCS (1993a) *1991 Census County Report: Durham* (part 1). London: HMSO.

OPCS (1993b) 1991 Census. Report for Great Britain. London: HMSO.

OPCS (1994) *1991 Census Small Area Statistics for Wards in County Durham.* Durham: Durham County Council.

OPCS (1995) *Standard Occupational Classification. Vol. 2. Second edition.* London: HMSO.

Oppenheim, A. (1966) *Questionnaire Design and Attitude Measurement.* London: Open University.

Ostbye, T. (1992) How to select a sample in primary care research. In: Stewart, M. *et al.*(eds) *Tools for Primary Care research.* London: Sage.

Ottway, R. (1980) *Defining the Change Agent.* Unpublished paper, UMIST, Manchester: Department of Management Sciences.

Peberdy, A. (1997) Evaluating health promotion. In: Katz, J., Peberdy, A. (eds) *Promoting Health: Knowledge and Practice.* Milton Keyne: Open University Press.

Pooling Project Research Group (1978) Relationship of blood pressure, serum cholesterol, smoking habit, relative weight and ECG abnormalities to incidence of major coronary events: final report of the Pooling Project. *Journal of Chronic Diseases*, 31: 201-306.

Poulton, B. (1990) Evaluating health visiting practice. *Nursing Standard*, 5:36-39.

Rimm, E. *et al.* (1991) Prospective study of alcohol consumption and risk of coronary heart disease in men. *Lancet*, 338: 464-8.

Royal College of Nursing (1996) Cervical screening: guidelines for good practice. *Issues in Nursing and Health*, no.28.

Royal College of Physicians (1987) *A Great and Growing Evil: The Medical Consequences of Alcohol Abuse.* London: Tavistock.

Ruta, D. *et al.* (1997) Determining priorities for change in primary care: the value of practice-based needs assessment. *British Journal of General Practice*, 47: 353-7.

Ryan, W. (1976) *Blaming the Victim.* New York: Pantheon Books.

Sandelowski, M (1986) The problem of rigor in qualitative research. *Advances in Nursing Science*, 8: 27-37.

Sanvik, L. *et al.* (1993) Physical fitness as a predictor of mortality among healthy, middle aged Norwegian men. *New England Journal of Medicine*, 328:533-7.

Saracci, R. (1997) The World Health Organisation needs to reconsider its definition of health. *British Medical Journal*, 314: 1409.

Seidell, J., Flegal, K. (1997) Assessing obesity: classification and epidemiology. *British Medical Bulletin*, 53: 238-52.

Silagy, C. *et al.* (1992) Lifestyle advice in general practice: rates recalled by patients. *British Medical Journal*, 305: 871-874.

Silverman, D. (1993) *Interpreting Qualitative Data. Methods for Analysing Talk, Text and Interaction.* London: SAGE.

Sourtzi, P., Nolan, P., Andrews, R. (1996) Evaluation of health promotion activities in community nursing practice. *Journal of Advanced Nursing*, 24: 1214-1223.

Speller, V., Learmonth, A., Harrison, D. (1997) The search for evidence of effective health promotion. *British Medical Journal*, 315: 361-363.

Stake, R. (1994) Case Studies. In: Denzin, N., Lincoln, Y., (eds) *Handbook of Qualitative Research.* London: Sage.

Stilwell, B. (1991) The rise of the practice nurse. *Nursing Times*, 87:26-8.

Strauss, A., Corbin, J. (1994) Grounded Theory methodology. In: Denzin, N., Lincoln, Y., (eds) *Handbook of Qualitative Research.* London: Sage.

Tannahill, A. (1985) What is health promotion? *Health Education Journal*, 44: 167-168.

Tones, K., Tilford, S., Robinson, Y. (1990) *Health Education: Effectiveness and Efficiency*. London : Chapman & Hall.

Townsend, P., Davidson, N. (1982) *Inequalities in Health : The Black Report*. Harmondsworth: Penguin.

US Preventive Task Force (1996) Counselling to prevent HIV infection and other sexually transmitted diseases. In *US Preventive Services Task Force. Guide to Clinical Preventive Services.* 2nd ed. Virginia: International Medical Publishing, 723-33.

Walker, Z., Townsend, J. (1999) The role of general practice in promoting teenage health: a review of the literature. *Family Practice*, 16: 164-72.

Waller, D. *et al.* (1990) Health checks in general practice: another example of inverse care? *British Medical Journal*, 300: 1115-18.

Whitehead, M. (1987) *The Health Divide: Inequalities in Health in the 1980's.* London: Health Education Council.

WHO (1946) *Constitution.* New York: WHO.

WHO (1977) *Health for All by the Year 2000.* Geneva: WHO.

WHO (1978) *Declaration of Alma-Ata.* From WHO's Regional Office for Europe website (http://www.who.dk/) Last consulted on 15/11/99 at: http://www.who.dk/policy/AlmaAta.htm

WHO (1986) *Ottawa Charter for Health Promotion.* From WHO's International website (http://www.who.int/) Last consulted on 15/11/99 at: http://www.who.int/hpr/docs/ottawa.html

WHO (1988) *The Adelaide Recommendations.* From WHO's International website (http://www.who.int/). Last consulted on 15/11/99 at: http://www.who.int/hpr/docs/adelaide.html

WHO (1991) *Sundsvall Statement on Supportive Environments for Health.* From WHO's International website (http://www.who.int/). Last consulted on 15/11/99 at: http://www.who.int/hpr/docs/sundsvall.html

WHO (1996) *Obesity Take it Seriously, Deal with it now.* Feature no.190. March 1996. From the WHO's website (http://www.who.int/). Last consulted on the 29/04/99 at: http://www.who.int/ncd/feat190e.htm

WHO (1997a) *The Jakarta declaration on Leading Health Promotion into the 21st Century.* From WHO's International website (http://www.who.int/). Last consulted on 15/11/99 at: http://www.who.int/hpr/docs/jakarta/english.html

WHO (1997b) Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. Acute myocardial infarction and combined oral contraceptives: results of an international multicentre case-control study. *Lancet*, 349: 1202-9.

WHO (1999) *Fifth Global Conference on Health Promotion.* Mexico City, 5-9 June 2000. From WHO's International website (http://www.who.int/). Last consulted on 30/08/99 at: http://www.who.int/hpr/hpr/conference2/index.html

Wicke, D. *et al.* (1994) The effectiveness of waiting room notice boards as a vehicle for health education. *Family Practice*, 11:292-5.

Williams, S., Calnan, M. (1991) Key determinants of consumer satisfaction with general practice. *Family Practice*, 8: 237-42.

Williams, S., Calnan, M. (1994) Perspectives on prevention: the views of general practtioners. *Sociology of Health and Illness*, 16: 374-393.

Wilson, A. *et al.* (1992) Health promotion in the general practice consultation: a minute makes a difference. *British Medical Journal*, 304: 227-30.

Woodhouse, J., Mackie, P. (1997) *County of Durham Public Health Statistics.* The public Health Directorate, County of Durham Health Authority.

Yin, R. (1989) *Case Study Research: Design and Methods.* London: Sage.

Appendix A

CHECK LIST (of non-participant observation)

1. Sex of the patient
2. Age
3. Date and length of the session
4. The session was carried out by:

   Practice nurse
   District nurse
   General Practitioner

5. Type of session.

   General
   Family planning clinic
   Diabetes clinic
   Asthma clinic
   Wound management clinic

6. Reasons for attending the session
7. Life styles and risk factors measured

BMI	Diet
Blood pressure	Exercise
Smoking	Screening attitude (breast/ testes self-examination, cervical smear)
Alcohol	Other

8. Health promotion on
   Smoking
   Alcohol
   Diet
   Exercise
   Screening
   Other

9. Health promotion through
   Oral counsel
   Leaflets
   Other

11. Referrals

    Doctor
    Dietician
    Counsellor
    Specific clinic
    Other

10. Questions asked
11. Topics covered
12. Notes

Appendix B

OBSERVATION NOTES

Practice Nurse H:

Health promotion posters in the room: osteoporosis, alcohol "think about drink", diabetes: check your eyes and general recommendations, AIDS, stop smoking, and travel immunisation.
I asked about the follow -up in the smear programme: every three years the patients receive up to three letters encouraging them to have a smear. After that, it is the patient's responsibility to book an appointment.

Session 1
Female 37 years old old
Blood test 3 min. pure technique.

Session 2.
Female 86 years old. 20 min session. Diabetes clinic.
Diabetic and pernicious anaemia. In treatment with B12 injections. Ulcers redressed every day. Forgot to bring urine sample, the PN gave her a sample to bring to the DNs (co-ordination). The nurse asked how and when does the patient control her glycemia. Her daughter checks glycemia if she feels weak or poorly.
The last analysis says that the glycemia control is getting better. The nurse said now, "if you want to have a biscuit, have it ".She is seeing the chiropodist
Check blood pressure. She asked the patient when was the last time she saw an optician? July 97. Recommended visiting again
Next review in 6 months
No refer to a dietician, the PN believes that most of the diabetics don't want to see a dietician because he/she is going to tell them not to eat fat, another prohibition. Then she talked about lowering lipid drugs and the treatment in general to reduce cholesterol, is it worthwhile cholesterol test? "It is like a passport to smokers to go on smoking "

Session 3.
Female 44 years old, daughter of the previous patient. 2 min session. Blood test. Pure technique.
I asked the PN, what was the test for? She didn't know exactly why. Something related with her osteo problems, she believed.

Session 4.
Male 37 years old. 12 min
Diabetic with chest pain two days of evolution, he it felt like indigestion. Referred from the doctor to have a blood test for cardiac enzymes and ECG. Asked to come back on Thursday.
Once he left I asked the nurse, does he smoke? she said: "he doesn't look like it"
Insulin dependent diabetic normally they go to the hospital diabetic clinic

The following day we find out he is in Coronary Unit diagnosed as suffering preinfarction angina. I found it out because, they have a list at the staff-entrance of the surgery , which provides information about the deaths and hospitalisations from the practice population.

Session 5.
Female 54. 6 min.
Check blood pressure
History of hypercholesterolemia
Every week check. Today 200/110 refereed to the doctor. The patient said she is very nervous, then, they talk about the possibility of 24-hour measurement
Nothing about salt or exercise during this session. However the patient comes every week, she probably has already received this advice. I don't ask the nurse because I don't want to influence in the following observations.

Session (cancelled)
Female expected for post natal contraception advice. Doesn't come round. Then we talk about non-attendance. The PN explains that all the patients are asked to please call to cancel the consultations, however some do not ring.

Session 6
Female 38 y. Came for ear syringing. Book appointment for 21 minutes, it lasted 10 min. PN removes the wax and then explained to the patient that ears have the ability to self clean and need wax for protection and advised her not to use cotton buds.

Session 7
Female 47years old. 6 min
Osteoporosis clinic prescription for Hormone treatment replacement
Check Bp 170/ 80. 75 Kg 1.57. PN does not calculate BMI:30.43. The patient is obese. However is not offered diet advice or encouraged to take exercise.
PN checked that smears are up to date. She remained the patient to do breast self-examination on a monthly basis. Asked to came back in 6 months.

Coffee break.
Talking about problems of teenager pregnancy, one of the PNs says that young girls want to get pregnant because they get the Government's aid. She (H) says, " it is like another option 1) study 2) look for a job 3) get pregnant..."
Solution? They don't know, but not in family planning (A) said, "it is too late", perhaps school nursing, and try to find the balance between the government aids and real needs. (H), She is worried about the future generations. Educated people have a very low birth rate. Those from lower social status, have higher birth, and teenager pregnancy rates.

Practice Nurse A:

Session 8
45 Male 2min
Volunteer worker in a psychiatric unit. Comes for second dose of Hep B vaccination.
Pure
e technique.

Session 9
Female 29 years old. smear 18min
Before the test the nurse interview the patient, checked she does breast self-examination on a monthly basis and checked blood pressure.
While the procedure takes placed a curtain, I stayed outside. Afterwards the nurse explained that she will receive the results at home within three weeks or so.

Session 10
Female 33 years old 12 min
Test to check ETS she has history of previous pelvic inflammatory disease. The nurse asked her to call for the results.

Session 11
Female 67 years old 6min
History of high blood pressure. The patient comes every week to have blood pressure measured. This time 130/ 95.

Session (cancelled)
Female 23 years old expected for smear
The last one was three months ago but repeating because she is having inter menstrual bleeding. She does not come.

Session (cancelled)
Another smear she does not came

Session 12
Male 58 year 3 min
Blood test cause colon carcinoma. Sigmoidoscopy
Pure technique

Session 13
Female 78 years old 5 min
Blood test anaemia
History of HTA
Pure technique

General Practitioner (C).
Fammily planing sessions.

Session 14
female 42 years old 12 min.
Repeated smear because last time sample did not have the two types of cells
Once the patient left, PN explained that every three months the surgery receives a report on inadequate results from the lab. The practice nurse was proud of the results because their inadequate rate of smear is one of the smallest in the area, only 6/495.

Session 15
A sixteen year old girl came with her boyfriend to the family planning clinic. She wanted the morning after pill because had "condom split" two days before. GP asked

about history of disease, check blood pressure, weight, height and smoking status. She smokes but no comment or advice was given. Then GP gave the prescription explaining how to take it, and also that there is a possibility of becoming pregnant, asking her what she would do. The patient did not know.
The doctor gave leaflets about contraception and folic acid in pregnancy. Before they left, the boy asked for condoms and the GP gave it to them.
Once they left, the doctor asked me what do you think? I replied that I wondered whether it was good to let them go without any word about the risk and consequences of having sex at 16. GP answered, "I am not here to judge people, I am here to help them".

Session 16
Female 38
Bleeding. Advise of the different types of contraception (pill, minipill, injection pill, IUD)
She will think about it

Session 17
24 years old F married 2 children
She uses condoms but she wants a new method of contraception. She had the pill before but she did not feel well. She came to have the IUD After pelvic exam, and just before explain how it works she says she is copper allergic, so we explain about another one: MIRENA. She accepted, but after having the anaesthesia she suffered sort of Vaso-vagal reaction, they have to stop. She will come back next week.

Session 18
19 years old female On contraception, 2 weeks bleeding just wondering if it is normal
Also two days ago split condom wonder if she needs the morning after pill. It is not necessary

Session 19
Female 30 years old. Family planning. Norplant check
She smokes no HP
She is worried because no periods and also she is gaining weight.
She gave a leaflet that explains other options for contraception. She will think about it and come back in January.

Session 20
17 year old girl who wants to start with the pill. 10 min
PN explain pros and cons
Give a guide of pregnancy folid acid and emergency contraception

Session 21
Family planning clinic. Lasted for 6 min.
25 years old patient taking minipill .
She suffers from intermenstrual bleeding so the GP increases the estrogen dose.

Practice Nurse H:

Session 22
Female 51 years old 3 min
Blood sample due to hypercholesterolemia
The nurse asked about diet, remind she should have a diet rich in vegetables and low in fat.
Pn measures BMI and BP. Fine
The patient smokes. The nurse insisted in the importance to quit
Once the patient left, the nurse commented "I wonder to what extent it is ethical to give lipid lower drugs if she goes on smoking."

Session 23
Female 65 years old 5 min
Essential hypertension Blood test due to high cholesterol she is not seeing a dietician
Blood pressure 120/80
She smokes. The nurse said you should quit, the patient explained, she has cut down and that she smokes because her husband does.
No BMI. Once the patient left, the nurse commented, "she probably drinks over the recommended limits" but that was not checked.

Session 24
Female 49 years old 5 min
Blood test for hormone levels. The nurse asked whether she did breast self-examination. Opportunistic advice on how to do it and the importance of doing it every month.

Session 25
Male 77 years old 5 min
Blood test because he is anaemic. Under B12 treatment
He comes frequently for his B 12 injections.
Kidney transplant 1994. Patient has a shunt. Chat about dialysis

Session 26
Male 60 years old 5 min
Blood pressure. Hypercholesterolemia
History of cerebral infarction and transitional ischaemic attacks
Diet . Health promotion on how reducing the fat intake
Not smoking status, nor BMI.

Session 27
5 min. Male, 59 years old come for cholesterol test. He is found to be a smoker. Practice nurse H. said, "you, know you should quit". He doesn't answer.

Session 28
Female 52 years old 5 min
Anaemia Came for B 12 deficiency.
Pure technique

Session 29
Hepatitis B vaccination Nurse student. The practice nurse checked if there was any contraindication before injecting it.
The patient asks about the new IUD She is in the pill but wants to change. Sometimes she forgets and she already has had a termination.
The nurse gives her a leaflet and suggests coming to the family planning clinic.

Session 30
Male 38 years old 4 min
History of abdominal pain, vomiting, and weighting lost. Referred from the doctor for blood test for enzymatic levels. Pure technique.

Session 31
Female 47 years old 13 min
Move from Texas; originally from Canada
New patient check. The nurse investigated history of family disease, her father suffered from diabetes. The nurse advice her she has a risk, she should not get obese
Check that immunisation and smears are up to date.
Check blood pressure 140/80, test urine and BMI.
About lifestyles, she doesn't smoke , drink beer from time to time, and does not take much exercise . The nurse encouraged her to exercise frequently.

Session 32
Male 17 years old (son of the previous patient)
New patient check.
Check immunisation record, blood pressure, BMI
Alcohol consumption sometimes beer
Smoking no. Mother was present that might have influenced the answer.

Session 33
67 years old Female
Under HRT, she comes for blood pressure check. The patient commented " I feel down in the dumps", no reaction from the PN.

Session 34
Female 18 years old 4 min
Blood test because. She feels tired all the time. referred from doctor's consultation for blood test. No questions.

Session 35
65 years old, male 6 min
Ear syringe. Health education about ear care.

Session 36
Female 48 years old 10 min
Irregular periods, is referred to gynaecologist, chat about this problem.

Practice Nurse A:

Session 37

Female 71 years old 4 min
Blood test pure technique

Session 38
Well-women check 63 years
She has noticed a strange smell in her urine last two days. She has had changes in her bowel habit for the last two years old. She is referred to the doctor
Opportunistically BP and weight

Session 39 - 40
Asthma clinic. Mother and her daughter both suffering from asthma. Mother 39 years old
The practice nurse asked questions to find out how the illness is interfering with her daily life, e.g. no. of workdays lost because of the illness, how she replies to activity like steps.
Check how she uses the drug devise.
Check blood pressure. Fine
Daughter 13 years old
Similar questions, e.g. no. are you missing school? Can you climb steps, play, physical activity?
Then the PN explained how to use the inhalators , differences and importance of each inhalator. Asked the patient to use it in front of her.
Check blood pressure.

Session 41
Asthma clinic. Male 12 years old old.
He didn't seem to accept the illness. He was not very collaborative during the session. The PN asked, "do you think you're wasting your time?" he did not reply. Then she reminded him how to use the inhalators. "Take your brown religiously (brown = colour of one of the inhalators)... if you do that probably you will not need the blue one, and nobody will notice that you've got asthma."

Session 42
Male 3 years old
Health promotion to the father.
Counsel about how take medicines, signs of improvement.

Practice Nurse H:

Session 43
Female 67 years old 25 min
Come for Diabetes clinic. Her son died last month. She was crying all the time. The nurse did not follow the protocol for diabetes. Instead she tried to find out how is she coping with the death of her son, whether she needs professional help, they chat for about 20 min. the patient look much more relaxed afterwards. The PN asked her to come for the diabetes check next month.

Session 44
Male 62 years old old, not diabetes clinic just review 9 min

Seen 3 months ago
Check blood pressure 130/70. Blood test
The patient asked the nurse whether it is possible to obtain pen for inject insulin for free. She explained that the National Health services offers free needles, but not pens.
Once he left, the nurse commented "they don't realise that there are many other chronic illness and people that don't receive so much help."
Normally insulin dependent diabetics attend the Clinic in the hospital.

Session 45
Female 67 years old
Come for b12 injections. Pure technique.

Session 46
Male 64 Jamaican taxi driver 10 min
Last seen 3 months ago. Normally are seen every 6 months but he has an hypo last September. He is worried since he notice that has a different type of insulin, the nurse suggest to check with the prescription, because it is possible that the chemist made a mistake.(finally that was the reason).
She asked him about home monitoring, and blood sugar charts he says yes, it is very important for diabetic but even more for him, he is a taxi driver . He has glucose in his car. He goes to check his eyes periodically and to the chiropodist.
He is in treatment with cholesterol lowering drugs but says that he only takes them from time to time, the nurse explain to him the importance of take them on a daily basis.

Session 47
24. Male 63 6 min
Hormonal disorder pituitary.
Check blood pressure, 200/90 he says he is nervous, blood test, talk about the medication Will come back to see the doctor in a fortnight

Session 48
Female 70y 7min
Blood test, suspect of B12 deficit
Diabetes Mellitus adult
Glaucoma
Blood pressure 160/80

Session 49
Female 53 years old 6 min. Hormonal replacement therapy
Check blood pressure Check the last smear and mammography test. PN insisted in the importance of follow this test. Nothing about exercise or diet.

Session 50
31 years old female. Post natal consultation. Delivery 8 weeks ago
Bottle-feeding. She had a normal delivery at home with the midwife. The patient explained the nurse she was very pleased with her midwife. She worked extra hours to attend her delivery.
Advise to wait for a smear at least a couple of weeks more, the uteri is not recovered yet.
The patient smokes (one could smell it) but no advise was given.

Once she left, the PNs comments. "It is fair that a midwife works"24h" for home delivery? and then the patient doesn't breast feed and smokes!"

Session 51
Male 60 years old 7min
Cholesterol check because his sister (71y)died 3 weeks ago due to a heart attack and now he is worried. He smokes. "You know, you should quit" the PN said . He doesn't reply
Low blood pressure
Checked alcohol consumption : 2 units per week.
Checked frequency of exercise: he explained he suffered from back pain, so he had limited activity, he left work because of that.
Check immunisation record. He already had flu vaccination
Check BMI< 25kg/m^2 . PN asked about the diet. He asserted having a healthy one (high in vegetables and fibre)

Once he left, the PNs wondered, should we do a cholesterol test? She believes is like a passport to keep on smoking

Session 52
Female 48 years old 5min
Hormone replacement therapy check
Blood pressure 140/90. Weight 83. Height 1.66. The Pn did not calculate the BMI at that moment, the patient is obese (>30kg/m^2) and did not receive any advice about weight reduction.
Checked smear up to date.
The patient said she was worried about HRT and breast cancer. The nurse explained to her although recent studies have suggested this link, the benefits of this therapy on osteoporosis and cardiovascular diseases justify the therapy. She also encourage to do breast self-examination and attend mammography programme for women over 50.

<u>District Nurse C</u>

Session 53
District Nurse. Wound Management Clinic
80 y old patient come with his son 15 min
Change the dressing. Venous ulcer, suspect to be infected they are waiting for the results Meanwhile Iodine dressing+compression

Session 54
Female around 70 , obese, venous ulcer left leg , waiting for results if infected to start ATB. She will come back on Thursday. No health promotion on diet or exercise. 10 min

Session 55
Female women in her seventies, diabetic, ulcer seems to be infected, no type of health promotion.

Practice Nurse A:

Session 56
Female 56 years old 16 min
Ear syringe. PN removed the wax and then explained to the patient that ears have the ability to self clean and need wax for protection and advised her not to use cotton buds.
Health promotion, don't use cotton buds, explains how to take care for the ears

Session 57
34 years old female
Came for the second doses of tetanus vaccine.
She feels "down in the dumps". She is refereed to the GP, she also has got articulation pain.
Cholesterol levels high. Talked about the diet.

Session 58
Female 49 years old. HRT clinic.
Smears up to date. Check blood pressure, 160/ 100. The patient seemed to be very nervous so she checked pressure again at the end of the session, this time was better, 140/80
Check the weight no changes since the last time
Check the last day of her last period

Session 59
17 year old girl, she has been on the pill for 8 months. She is taking Microgynon. and comes for the prescription.
The nurse reminded her that if she was taking antibiotics, having diarrhoea or vomiting , she should take extra precautions. She smokes (yellow fingers) but the nurse didn't say anything.
It is recorded that she is aware of folic acid and of post-coital conception PCC
Check weight, height and blood pressure 9 min

Session 60
17y female. She wants the morning after pill. She is on the pill but she forgot it last Friday. She is in the 72 hours since the intercourse.
The nurse check in which day of the pill the patient was in order to confirm is there is a chance to be pregnant.
The nurse explains the mechanism of the morning after pill, and also asks what would she do if it didn't work. She says she would keep it, she has already talked about this with her boyfriend they have a two year old relation and he is getting a job.
Do not ask about smoking status.
Check weight, height and blood pressure
Come back in three weeks

Session 61
Female 46 years old 20 min
She is on the pill information about ATB, diaorea, vomiting..
Check BP weight and height

The patient said "I fell so gloomy", then she began to cry. Her mum died 2 months ago. The nurse asks about her feelings she said that she had very "negative" thoughts. Her brother committed suicide several years old ago.
Is refereed to the GP and also given the Hospital Counsel number. The PN said:
"I am not a counsellor I don't have the time all I can do is refer her to the GP or to the Hospital counsel. Probably she needs antidepressant drugs"

Session 62
Female 17. Came for the morning after pill 15 min
She already had once one year ago.
She explained she didn't take any protection. It is not the first time she has sex without protection, but it is since her last period. She doesn't know what she will do if she gets pregnant. She has a boyfriend for the last two years old
The nurse suggests the idea of starting the pill. She accepts, then she explains how it works, check BP, weight, height and smoking status (she does not smoke)
Come back in three weeks

Session 63
A 47 years old woman came for the second dose of Hepatitis B vaccination. Looking at her file the practice nurse realised that her smear test was overdue and offered to have the procedure carried out there and then. The patient refused by saying that it was not the right moment but she would book an appointment.

Session 64
Female 16 years old. Came to the clinic with her school tutor. She wanted to start with the pill. The practice nurse asked a set of questions and found out that the girl had unprotected sex six weeks before and was two weeks late. A pregnancy test was recommended and booked for the next day. The practice nurse asked then what she would do if she was pregnant. Her tutor answer for her, "termination for sure, she is too young to have a baby".
The practice nurse suggested start with the pill in case she is not pregnant. Blood pressure, weight, height and smoking status were measured. The patient was a smoker but no health education was given. Before the patient left, the nurse reminded her: "is your choice to have sex or not, even sometimes you may feel pressure, you should think about it carefully".

Practice Nurse H:

Session 65
8 min Male 40 y comes for diabetes clinic. Blood test
The practice nurse asked when was the last time he had his eyed checked. Two months ago, the problem is after checking his eyes he has to drive to work so he hasn't got his retina, checked. The nurse advises him to go to Boots on a Saturday.
Blood pressure 110/70
85 kg , two more than last time. He replied: I've been very stressed and I eat when I am stressed.
The nurse asked him to bring urine the next time for proteins.
The PNs recalled the importance of control blood pressure, she commented " there is a new research that says it is almost as important as blood sugar" . He agreed and said he already knew about that.

Session 66
59 y female 15 min
Diabetes since 1961 Insulin dependent. Check every 6 months
Cervical Cancer history, now bowel problems due to radiation. She suffers from colitis.
She brings urine, the PNs testes(protein levels) it and it is negative
She testes her blood herself more often if she is not right.
She is afraid of things getting worse.
Blood pressure 134/70. Eyes done in August. She should ask them to send a report
She goes to the chiropodist every six months. The PNs informed her that next time there will be a chiropodist in the surgery, but only for check sensibility and pulse.
1.65 and 76 kg , the same as before
She asked if she need a dietician, she doesn't want she manages herself.

Session 67
10 min. Female patient 67 years old come to have a blood sample taken. Possible diabetes, under study The practice nurse asked whether her diet was very sugary. to which the patient answered, "yes". The practice nurse said" try to cut down"

Session 68
71 years old Male Injection of sustanon (testosterone) Hypopituitarism.
History of heart disease now is treated with sinvastatine. No comments about diet or exercise.

Session 69
67 years old female 12 min
DNID talk about monitoring, diet
Eyes checked recently
Exercise
Diet discussed
She didn't bring urine test, next time

Practice Nurse A:

Session 70
Female 40 years old 10 min
Smear routine female
Blood pressure fine
She does self-breast examination without problems; she is not taking pill or IUD
Smear done she will receive the results by post within a month. If not, she should phone the practice, explained the PN

Session 71
17 years old male 11 min
Ear sringing. Health education about ear care. Once he leaves the nurse notice he is asthmatic and hasn't been seen since 96

Session72
Blood test
39 years old female (sister)
Has a cochlea implant and explain us about it

Session 73
77 years old Female
Holiday vacation. She is going to India the nurse gave her travel information and immunisation.

Session 74
25 years old male12 min
Ear syringe
The nurse explain him that next time he needs to put the oil four days in advance otherwise it is too hard. Health education about ear care.

Session 75
77 years old male 7 min
Blood test Purines
Routine

Appendix C

QUESTIONNAIRE ☐☐☐

PART 1. Personal details

1. Are you?

Male ☐ Female ☐

2. Date of birth: ...../...../.....

3. What is your marital status? Are you:

Married ☐ Single ☐ Divorced ☐

Widowed ☐ Separated ☐

4. How many people live in your house? *(not including yourself)*

5. Do you have any children?

Yes ☐ No ☐ *If No, please go to question 7.*

6. Please state the number of children per age group, if appropriate:

Age	No. of children
0-5	
6-11	
12-16	
17-21	
22-25	

12. How fit are you?

Very fit ☐ Fit ☐ Fairly fit ☐

Unfit ☐ Not fit at all ☐

13. How regularly do you take exercise?

Very often ☐ Often ☐ Occasionally ☐ Not at all ☐

Could you also tell us which kind of exercise and how many times per week do you exercise, please?

_____

_____

_____

14. How many units of alcohol per week do you usually drink?

(1 unit = half pint beer = a glass of wine = 1 measure of spirits)

None ☐ 1-5 ☐ 6-14 ☐ 15-21 ☐

22-28 ☐ 29-34 ☐ >35 ☐

15. How often do you take alcohol?

Every day ☐ Twice per week ☐

5 days per week ☐ Once per week ☐

At least three times per week ☐ Never ☐

21. Have you tried giving up?

Yes ☐ No ☐

If yes, how many times have you tried? .....

22. Would you like help to give up smoking?

Yes ☐ No ☐

23. About your diet:

	Every day	5 times per week	3 times per week	Once per week	Never
Do you eat breakfast?					
Do you eat fruit or vegetables?					
How often do you eat wholemeal bread or wholegrain cereal (E.g. Weetabix, porridge, brown rice, wholemeal pasta)?					
How often do you eat fried food?					
How often do you eat proteins (E.g. fish, meat, nuts...)?					
How often do you eat red meat (E.g. hamburger, salami, beef, sausage, bacon, liver..)?					
How often do you eat fish or poultry?					
How often do you eat fatty foods (E.g. chips, crisp, pies, pasties, sausage rolls...)?					
How often do you eat sweets, cakes or take soft drinks?					
Do you add salt to your meals or eat salty foods (E.g. crisp, salted nuts or salty snacks) ?					

24. When you eat away from home, how often do you choose low fat foods?

Always ☐ Often ☐ Seldom ☐ Never ☐

29. Do you use any form(s) of contraception?

Yes ☐ No ☐

If, so, which one(s)?

Condom ☐ Contraceptive pill ☐

IUD ☐

Other (please state) _____

Questions 30-32 Women only: *(Men go to question 33)*

30. When was your last cervical smear date?

a. Within the last year ☐ d. More than three years ago ☐

b. Within the last two years ☐ e. I've never had one ☐

c. Within the last three years ☐

31. If your answer is either "d" or "e", please explain the reasons why you haven't had a smear during the past three years.

_____

_____

_____

32. Do you do breast self-examination?

Yes ☐ No ☐

If No, please explain why.

_____

_____

_____

36. When did you last consult your Practice nurse, Health Visitor or District Nurse?

	Practice nurse	Health Visitor	District Nurse
Within the past month			
Within the past 6 months			
Within the past year			
1-2 years ago			
3 or more years ago			
Never			

37. What was the purpose of your last visit?

_____

_____

_____

38. Which of the following health promotion information have you received from the community nurse?

Smoking ☐ Exercise ☐ Drinking ☐

Weight reduction ☐ Drug abuse ☐ Stress ☐

Travel advice and Immunisation ☐ Pre-pregnancy counselling (e.g. folic acid) ☐

AIDS ☐ Diet ☐ None ☐

Other (please state) _____

39. How helpful was the information?

Very helpful ☐ Fairly helpful ☐

Not very helpful ☐ Don't know ☐

PILOT QUESTIONNAIRE ☐☐☐

PART 1. Personal details

1. Are you?

Male ☐ Female ☐

2. How old are you? .....years

3. What is your marital status? Are you:

Married ☐ Single ☐ Divorced ☐

Widowed ☐ Separated ☐

4. How many people are living with you? .....

5. Do you have any children?

Yes ☐ No ☐ *If No, please go to question 7.*

6. Please state the number of children per age group, if appropriate:

Age	No. of children
0-5	
6-11	
12-16	
17-21	
22-25	

12. How fit are you?

Very fit ☐ Fit ☐ Fairly fit ☐

Unfit ☐ Not fit at all ☐

13. How regularly do you take exercise?

Very often ☐ Often ☐ Occasionally ☐ Not at all ☐

Could you also tell us which kind of exercise and how many times per week do you exercise, please?

_____

_____

_____

14. How many units of alcohol per week do you usually drink?

(1 unit = half pint beer = a glass of wine = 1 measure of spirits)

None ☐ 1-5 ☐ 6-14 ☐ 15-21 ☐

22-28 ☐ 29-34 ☐ > 35 ☐

15. How often do you take alcohol?

Every day ☐ Twice per week ☐

5 days per week ☐ Once per week ☐

At least three times per week ☐ Never ☐

21. Have you tried giving up?

Yes ☐ No ☐

If yes, how many times have you tried? .....

22. Would you like help to give up smoking?

Yes ☐ No ☐

23. About your diet:

	Every day	5 times per week	3 times per week	Once per week	Never
Do you eat breakfast?					
Do you eat fruit or vegetables?					
How often do you eat wholemeal bread or wholegrain cereal (E.g. Weetabix, porridge, brown rice, wholemeal pasta)?					
How often do you eat fried food?					
How often do you eat proteins (E.g. fish, meat, nuts...)?					
How often do you eat red meat (E.g. hamburger, salami, beef, sausage, bacon, liver..)?					
How often do you eat fish or poultry?					
How often do you eat fatty foods (E.g. chips, crisp, pies, pasties, sausage rolls...)?					
How often do you eat sweets, cakes or take soft drinks?					
Do you add salt to your meals or eat salty foods (E.g. crisp, salted nuts or salty snacks) ?					

24. When you eat away from home, how often do you choose low fat foods?

Always ☐ Often ☐ Seldom ☐ Never ☐

29. Do you use any form(s) of contraception?

Yes ☐ No ☐

If, so, which one(s)?

Condom ☐ Contraceptive pill ☐

IUD ☐

Other (please state) _____

Questions 30-32 Women only: *(Men go to question 33)*

30. When was your last cervical smear date?

a. Within the last year ☐ d. More than three years ago ☐

b. Within the last two years ☐ e. I've never had one ☐

c. Within the last three years ☐

31. If your answer is either "d" or "e", please explain the reasons why you haven't had a smear during the past three years.

_____

_____

32. Do you do breast self-examination?

Yes ☐ No ☐

If No, please explain why.

_____

_____

36. When did you last consult your Practice nurse, Health Visitor or District Nurse?

	Practice nurse	Health Visitor	District Nurse
Within the past month			
Within the past 6 months			
Within the past year			
1-2 years ago			
3 or more years ago			
Never			

37. What was the purpose of your last visit?

_____

_____

38. Which of the following health promotion information have you received from the community nurse?

Smoking ☐ Exercise ☐ Drinking ☐

Weight reduction ☐ Drug abuse ☐ Stress ☐

Travel advice and Immunisation ☐ Pre-pregnancy counselling (e.g. folic acid) ☐

AIDS ☐ Diet ☐ None ☐

Other (please state) _____

39. How helpful was the information?

Very helpful ☐ Fairly helpful ☐

Not very helpful ☐ Don't know ☐

Appendix D

Dear Patient,

The medical and nursing staff at "A" Surgery are interested in finding out which kind of health promotion information you need now and in the future. We are asking you to help us by completing the attached questionnaire. The information you provide will help the practice to meet your needs.

To complete this questionnaire will take you approximately 15 minutes of your time. It is very important that you complete the questionnaire so that we can include as many viewpoints as possible when planning future services. **The information you provide is treated as strictly confidential.**

I would be grateful if you could return the completed questionnaire as soon as possible, using the enclosed SAE, to the Centre for Health Studies, University of Durham where analysis of the results will take place.

Thank for your help.

Yours faithfully

Dr M

Appendix E

Dear Patient,

I do not seem to have received the questionnaire which was sent to you a couple of weeks ago. We are conducting an important survey on health promotion requirements of patients.

I would be grateful if you could take a few minutes to complete and return the questionnaire to Durham University, as soon as possible, using the stamped addressed envelope provided in my previous correspondence.

If you have mislaid your questionnaire, please ring the Centre for Health Studies on 0191 374 2313 to request a replacement.
Thank you for your help.

Yours faithfully,

Dr M

Appendix F

INTERVIEW GUIDE

As you may know, I am a nurse from Spain seconded by the University of Navarra to study community nursing by research in Durham University. I specifically want to find out other perspectives about health promotion. First I would like to ask you some general questions about your surgery.

- How long have you been working for this surgery?
- What about your practice population? Do you keep statistics about the practice population? If not, Why?
- Is it representative of the whole area of "District B"?
- How important in your point of view is health promotion? Can you clarify what you understand by health promotion?
- What types of health promotion activities are carried out in this surgery?
- Who is responsible for each activity?
- What do you think about the nurses role in health promotion?
- The last White Paper said that "nurses, midwives and health visitors play a crucial part in promoting health and preventing illness" It also underlined that public health should be evidence-based. Is the health promotion provided by the nurses in your surgery evidence-based?
- How could you measure the effectiveness of the health promotion given in your practice?
- I've been observing their work. It appears that when they are running specific clinics, like diabetes or HRT, they carry out surveillance of lifestyles and give some health promotion. However, in normal consultations the level of health promotion appears to be relatively low. Should there be a protocol in opportunistic health promotion advice and life styles surveillance?

- Do you keep statistics about health promotion? Are the statistics given to the authorities?
- How is the money allocated on health promotion activities? Are there any priorities? Do you think financial constraints prevent routine surveillance of lifestyles?
- How much is spent on curative/ preventive practice?
- Moving to the New Government Health Targets for 2010:

  CANCER: to reduce the death rate in people under 75 by at least a fifth

  CORONARY HEART DISEASE and STROKE: to reduce the death rate in people under 75 by at least two fifths

  ACCIDENTS: to reduce the death rate by at least a fifth and serious injury by at least a tenth.

  MENTAL ILLNESS: to reduce the death rate from suicide and undetermined injury by at least a fifth.

  How is surgery "A" going to tackle those?
- Thinking about your practice population, do these targets satisfy them? How can your surgery contribute to tackle them?
- Talking to some of the nurses during the observation period, there are some issues they seem to be worried about:

  Using lipid-lowering drugs and cholesterol test as a passport to smokers to go on smoking

  Managing mental health problems

  Teenager pregnancy

  What are your views about it? What do you think can be done about it?
- This are the results of the postal questionnaire sent to 516 patients. Could you please made some comments on them?
- Is there anything you would like to change from the health promotion point of view?

Appendix G

RAW DATA FROM THE QUESTIONNAIRE.

Figures represent mean (SD) or n (%)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Age (years)	34.1(7.2)	33.6 (8.3)	33.8(7.8)
Marital Status			
Married	70(54.3)	109(58.3)	179(56.6)
Single	49(38)	51(27.3)	100(31.6)
Divorced	9(7)	20(10.7)	29(9.2)
Widowed	0	0	
Separated	1(0.8)	6(3.2)	7(2.2)
No answer	0	1(0.5)	1(0.3)
No. people living with	2.1(1.3)	2.3(1.2)	2.3(1.3)
No. Children	0.98 (1.02)	1.28(1.16)	1.7(1.1)
Ethnic Group			
African	1 (0.8)	1(0.5)	2(0.6)
Asian	5(3.9)	4(2.1)	9(2.8)
Caribbean	2(1.6)	1(0.5)	3(0.9)
European (other than UK)	1(0.8)	5(2.7)	6(1.9)
UK	117 (90.7)	176(94.1)	293(92.7)
Other	3(2.4)	0	3(0.9)
Employment			
Full-time high education	5(3.9)	14(7.5)	19(6)
Working full time	98(76)	73(39)	171(54.1)
Working part time	5(3.9)	46(24.6)	51(16.1)
Unemployed	11(8.5)	23(12.3)	34(10.8)
Long-term sickness	7(5.4)	0	27(8.5)
Housewife	0	27(14.4)	7(2.2)
Other	2(1.6)	2(0.5)	4(1.3)
No answer	1(0.8)	2(0.5)	3(0.9)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Standard Occupational Classification			
I Professional occupations	17(13.2)	8(4.3)	25(7.9)
II Managerial and Technical	28(21.7)	45(24.1)	73(23.1)
IIIN Skilled occupation (non-manual)	17(13.2)	40(21.4)	57(18)
IIIM Skilled occupation (manual)	26(20.2)	10(5.3)	36(11.4)
IV Partly skilled occupations	12(9.3)	8(4.3)	20(6.3)
V Unskilled occupation	1(0.8)	4(2.1)	5(1.6)
Not employed at that time	26(20.1)	68(21.5)	94(29.7)
No answer	2(1.6)	4(2.1)	6(1.8)
BMI (kg/m^2)			
<20	2(1.6)	31(16.6)	33(10.4)
20-25	58(45)	96(51.3)	154(48.7)
25-30	56(43.4)	27(14.4)	83(26.3)
>30	10(7.8)	27(14.4)	37(11.7)
Self-perception of fitness			
Very fit	7(5.4)	3(1.6)	10(3.2)
Fit	45(34.9)	36(19.3)	81(25.6)
Fairly fit	56(43.4)	127(67.9)	183(57.9)
Unfit	18(14)	20(10.7)	38(12)
Not fit at all	2(1.6)	0	2(0.6)
Frequency of exercise			
Very often	21(16.3)	20(10.7)	41(13)
Often	40(31)	72(38.5)	112(35.4)
Occasionally	55(32.6)	85(45.5)	140(44.3)
Not at all	12(9.3)	10(5.3)	22(7)
Times exercise/week	3.1(2.4)	4.3 (3)	3.8(2.8)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Units of alcohol /week			
None	12(9.3)	43(23)	55(17.4)
1-5	35(27.1)	73(39)	108(34.2)
6-14	41(31.8)	51(27.3)	92(29.1)
15-21	13(10.1)	12(6.4)	25(7.9)
22-28	17(13.2)	6(3.2)	23(7.3)
29-34	2(1.6)	1(0.5)	3(0.9)
>35	8(6.2)	1(0.5)	9(2.8)
No answer	1(0.8)	0	1(0.3)
How often alcohol			
Every day	8(6.2)	8(4.3)	16(5.1)
5 days per week	14(10.9)	14(7.5)	28(8.9)
at least 3 times per week	27(20.9)	31(16.6)	58(18.4)
twice per week	31(24)	44(23.5)	75(23.7)
Once per week	36(27.9)	46(24.6)	82(25.9)
Never	12(9.3)	44(23.5)	56(17.7)
No answer	1(0.8)	0	1(0.3)
Sun Protection			
Sun-cream	91(70.5)	160(85.4)	251(79.4)
Avoid mid-day sun	27(20.9)	55(29.4)	82(25.9)
Protective clothing	44(34.1)	59(31.5)	103(32.6)
No sunbathe	30(23.2)	28(14.9)	58(18.3)
No measure	14(10.3)	15(8)	29(9.2)
Sun-cream factor Face			
0-5	9(7)	17(9.1)	26(8.2)
6-10	21(16.3)	27(14.4)	48(15.2)
11-15	27(20.9)	59(31.6)	86(27.2)
16-20	14(10.9)	24(12.8)	38(12)
>20	16(12.4)	27(14.4)	43(13.6)
No sun-cream	42(32.6)	33(17.6)	75(23.7)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Sun-cream factor Body			
0-5	8(6.2)	15(8)	23(7.3)
6-10	24(18.6)	47(25.1)	71(22.5)
11-15	23(17.8)	45(24.1)	68(21.5)
16-20	14(10.9)	18(9.6)	32(10.1)
>20	9(7)	16(8.6)	25(7.9)
No sun-cream	51(39.5)	46(24.6)	97(30.7)
Smokers	32(25)	48(25.8)	80(25.5)
Type of tobacco			
Cigarettes	28(87.5)	48(100)	76(95)
Cigars	4(12.5)	0	4(5)
Pipe	0	0	0
Years of smoking [a]	13.9(9.1)	15.4(8.5)	14.8(8.7)
Daily cigarettes [a]			
<10	15(46.9)	18(37.5)	33(41.3)
11-19	8(25)	21(43.8)	29(36.3)
20-29	7(21.9)	8(16.7)	15(18.8)
30-40	1(3.1)	1(2.1)	2(2.5)
>40	1(3.1)	0	1(1.3)
Tried to quit [a]	20(66.7)	38(79.2)	58(74.4)
Want help to quit smoking [a]			
Yes	20(64.5)	28(62.2)	48(63.2)
No	11(35.5)	16(35.6)	27(35.5)
Don't Know	0	1(2.2)	1(1.3)

[a] (%) over the total no. of smokers

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Eat breakfast			
Every Day	68(52.7)	117(62.6)	185(58.5)
5 times per week	8(6.2)	13(7)	21(6.6)
3 times per week	18(14)	16(8.6)	34(10.8)
Once per week	19(14.7)	17(9.1)	36(11.4)
Never	15(11.6)	23(12.3)	38(12)
No answer	1(0.8)	1(0.5)	2(0.6)
Eat fruit and vegetables			
Every Day	61(47.3)	98(52.4)	159(50.3)
5 times per week	29(22.5)	47(25.1)	76(24.1)
3 times per week	25(19.4)	28(15)	53(16.8)
Once per week	9(7)	12(6.4)	21(6.6)
Never	4(3.1)	1(0.5)	5(1.6)
No answer	1(0.8)	1(0.5)	2(0.6)
Eat wholegrain bread/cereal			
Every Day	37(28.7)	80(42.8)	117(37)
5 times per week	12(9.3)	26(13.9)	38(12)
3 times per week	28(21.7)	36(19.3)	64(20.3)
Once per week	27(20.9)	30(16)	57(18)
Never	23(17.8)	15(8)	38(12)
No answer	2(1.6)	0	2(0.6)
Eat fried food			
Every Day	3(2.3)	4(2.1)	7(2.2)
5 times per week	7(5.4)	6(3.2)	13(4.1)
3 times per week	41(31.8)	33(17.6)	74(23.4)
Once per week	57(44.2)	84(44.9)	141(44.6)
Never	18(14)	52(27.8)	70(22.2)
No answer	3(2.3)	8(4.3)	11(3.5)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Eat proteins			
Every Day	41(31.8)	60(32.1)	101(32)
5 times per week	29(22.5)	42(22.5)	71(22.5)
3 times per week	47(36.4)	56(29.9)	103(32.6)
Once per week	11(8.5)	25(13.4)	36(11.4)
Never	0	3(1.6)	3(0.9)
No answer	1(0.8)	1(0.5)	2(0.6)
Eat red meat			
Every Day	6(4.7)	3(1.6)	9(2.8)
5 times per week	21(16.3)	14(7.5)	35(11.1)
3 times per week	54(41.9)	69(36.9)	123(38.9)
Once per week	36(27.9)	78(41.7)	114(36.1)
Never	10(7.8)	22(11.8)	32(10.1)
No answer	2(1.6)	1(0.5)	3(0.9)
Eat fish and poultry			
Every Day	2(1.6)	4(2.1)	6(1.9)
5 times per week	13(10.1)	28(15)	41(13)
3 times per week	70(54.3)	83(44.4)	153(48.4)
Once per week	40(31)	61(32.6)	101(32)
Never	3(2.3)	11(5.9)	14(4.4)
No answer	1(0.8)	0	1(0.3)
Eat fatty foods			
Every Day	9(7)	11(5.9)	20(6.3)
5 times per week	21(16.3)	17(9.1)	38(12)
3 times per week	51(39.5)	50(26.7)	101(32)
Once per week	40(319	90(48.1)	130(41.1)
Never	6(4.7)	18(9.6)	24(7.6)
No answer	2(1.6)	1(0.5)	3(0.9)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Eat sweets/ drink soft drinks			
Every Day	21(16.3)	41(21.9)	62(19.6)
5 times per week	30(23.3)	32(17.1)	62(19.6)
3 times per week	41(31.8)	51(27.3)	92(29.1)
Once per week	29(22.5)	50(26.7)	79(25)
Never	7(5.4)	10(5.3)	17(5.4)
No answer	1(0.8)	3(1.6)	4(1.3)
Add salt/ eat salty food			
Every Day	41(31.8)	46(24.6)	87(27.5)
5 times per week	12(9.3)	20(10.7)	32(10.1)
3 times per week	27(20.9)	33(17.6)	60(19)
Once per week	21(16.3)	52(27.8)	73(23.1)
Never	26(20.2)	36(19.3)	62(19.6)
No answer	2(1.6)	0	2(0.6)
Choose law fat foods			
Always	8(6.2)	9(4.8)	17(5.4)
Often	33(25.6)	76(40.6)	109(34.5)
seldom	57(44.2)	74(39.6)	131(41.5)
Never	28(21.7)	27(14.4)	55(17.4)
No answer	3(2.4)	1(0.5)	4(1.2)
Become anxious about things			
Very often	10(7.8)	30(16)	40(12.7)
Often	25(19.4)	63(33.7)	88(27.8)
Occasionally	73(56.6)	85(45.5)	158(50)
Not at all	18(14)	7(3.7)	25(7.9)
No answer	3(2.3)	2(1.1)	5(1.6)
Episode of depression			
Yes	34(26.4)	78(41.7)	112(35.4)
No	93(72.1)	108(57.8)	201(63.6)
No answer	2(1.6)	1(0.5)	3(0.9)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Sleep badly			
Very often	6(4.7)	10(5.3)	16(5.1)
Often	30(23.3)	50(26.7)	80(25.3)
Occasionally	66(51.2)	105(56.1)	171(54.1)
Not at all	25(19.4)	21(11.2)	46(14.6)
No answer	2(1.6)	1(0.5)	3(0.9)
Self-reported health problems			
Allergies	29(22.5)	45(24.1)	74(23.4)
Arthritis	6(4.7)	7(3.7)	13(4.1)
Asthma	20(15.5)	12(6.4)	32(10.1)
Chronic Bronchitis	0	0	0
Cancer	1(0.5)	0	1(0.3)
Circulatory Problems	2(1.6)	11(5.9)	13(4.1)
Cholesterol Problems	7(5.4)	3(1.6)	10(3.2)
Chronic Fatigue	1(0.8)	4(2.1)	5(1.6)
High Blood Pressure	3(2.3)	4(2.1)	7(2.2)
Chronic Pain	4(3.1)	10(5.3)	14(4.4)
Depression	12(9.3)	24(12.8)	36(11.4)
Diabetes	3(2.3)	2(1.1)	5(1.7)
Digestive Problems	12(9.3)	23(12.3)	35(11.6)
Multiple Sclerosis	24(18.6)	47(25.1)	1(0.3)
Sexually transmitted diseases	1(0.8)	0	1(0.3)
AIDS	0	0	0
Stress	24(18.6)	47(25.1)	71(22.5)
Weight problems	9(7)	37(19.8)	46(14.6)
Contraception use			
Yes	52(40.3)	96(51.3)	148(48.1)
No	72(55.8)	88(47.1)	160(50.6)
No answer	5(3.9)	3(1.6)	8(2.5)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Type of contraception			
Condom	38(29.5)	22(11.8)	60(19)
Contraceptive pill	2(1.6)	39(20.9)	41(13)
Condom & pill	0	7(3.7)	7(2.2)
IUD	1(0.8)	12(6.4)	13(4.1)
Other	12(9.3)	16(8.7)	28(8.8)
Last cervical smear			
Within the last year		61(32.6)	
Within the last two years		56(29.9)	
Within the last three years		28(15)	
More than three years ago		19(10.2)	
I've never had one		16(8.6)	
No answer		7(3.7)	
Do you do breast-self examination			
Yes		146(78.1)	
No		33(17.6)	
No answer		8(4.3)	
Do you do testicular-self examination			
Yes	61(47.3)		
No	65(50.4)		
No answer	3(2.3)		
Last visit GP practice			
Within the past month	27(20.9)	54(28.8)	81(25.6)
Within the past 6 month	39(30.2)	93(49.7)	132(41.8)
Within the past year	28(21.7)	17(9.1)	45(14.2)
1-2 years ago	25(19.4)	16(8.6)	41(13)
3 or more years ago	8(6.2)	2(1.1)	10(3.2)
Never	0	0	0
No answer	2(1.6)	5(2.7)	7(2.2)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Last visit Practice Nurse			
Within the past month	6(4.7)	21(11.2)	27(8.5)
Within the past 6 month	11(8.5)	42(22.5)	53(16.8)
Within the past year	9(7)	24(12.8)	33(10.4)
1-2 years ago	24(18.6)	47(25.1)	71(22.5)
3 or more years ago	13(10.1)	16(8.6)	29(9.2)
Never	55(42.6)	21(11.2)	76(24.1)
No answer	11(8.5)	16(8.6)	27(8.5)
Last visit your Health Visitor			
Within the past month	0	5(2.7)	5(1.6)
Within the past 6 month	1(0.8)	14(7.5)	15(4.7)
Within the past year	0	8(4.3)	8(2.5)
1-2 years ago	0	5(2.7)	5(1.6)
3 or more years ago	0	11(5.9)	11(3.5)
Never	73(56.6)	29(15.5)	102(32.3)
No answer	55(42.6)	115(61.5)	170(53.8)
Last visit District Nurse			
Within the past month	0	2(1.1)	2(0.6)
Within the past 6 month	1(0.8)	3(1.6)	4(1.3)
Within the past year	0	1(0.5)	1(0.3)
1-2 years ago	1(0.8)	1(0.5)	2(0.6)
3 or more years ago	2(1.6)	5(2.7)	7(2.2)
Never	71(55)	42(22.5)	113(35.8)
No answer	54(41.9)	133(71.1)	187(59.2)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Have received information on			
Smoking	1(0.8)	8(4.3)	7(3.1)
Weight reduction	5(3.9)	4(2.1)	9(4)
Travel advice and immunisation	6(4.7)	14(7.5)	20(8.9)
AIDS	0	1(0.5)	1(0.4)
Exercise	5(3.9)	5(2.7)	9(4.2)
Drug abuse	0	2(1.1)	0
Pre-pregnancy counselling		16(8.6)	13(5.8)
Diet	6(4.7)	9(4.8)	13(5.8)
Drinking	2(1.6)	2(1.1)	4(1.8)
Stress	1(0.8)	2(1.1)	3(1.3)
How helpful was the information			
very helpful	6(4.7)	26(13.9)	32(10.1)
fairly helpful	6(4.7)	17(9.1)	23(7.3)
not very helpful	1(0.8)	2(1.1)	3(0.9)
don't know	9(7)	5(2.7)	14(4.4)
No answer	107(82.9)	137(73.3)	244(77.2)
Would like more information on			
Smoking	20(15.5)	20(10.7)	40(12.7)
Weight reduction	27(20.9)	58(31)	85(26.9)
Travel advice and immunisation	15(11.6)	14(7.5)	29(9.2)
AIDS	3(2.3)	8(4.3)	11(3.5)
Exercise	40(31)	50(26.7)	90(28.5)
Drug abuse	4(3.1)	10(5.3)	14(4.4)
Pre-pregnancy counselling		9(4.8)	9(2.8)
Diet	18(14)	39(20.9)	57(18)
Drinking	11(8.5)	10(5.3)	21(6.6)
Stress	36(27.9)	62(33.2)	98(31)

Characteristics	Men (n=129)	Women (n=187)	Totals (n=316)
Main sources health information			
TV	69(53.5)	72(39)	142(44.9)
Doctor	93(72.1)	40(21.4)	68(21.5)
Magazines	79(54.3)	135(72.2)	205(64.9)
Chemist	13(10.1)	30(16)	43(13.6)
Nurse	5(3.9)	10(5.3)	15(4.7)
Relatives	28(21.7)	36(19.3)	64(2.3)
Other	10(7.8)	20(10.7)	30(9.5)
I am responsible for my health			
strongly agree	65(50.4)	82(43.9)	147(46.5)
agree	54(41.9)	92(49.2)	146(46.2)
disagree	1(0.8)	2(1.1)	3(0.9)
strongly disagree	1(0.8)	1(0.5)	2(0.6)
not sure	6(4.7)	7(3.7)	13(4.1)
No answer	2(1.6)	3(1.6)	5(1.6)