

Promoting physical activity in South Asian Muslim women through 'exercise on prescription'

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Health Technology Assessment
NHS R&D HTA Programme





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NHS R&D HTA Programme

The NHS R&D Health Technology Assessment (HTA) Programme was set up in 1993 to ensure that high-quality research information on the costs, effectiveness and broader impact of health technologies is produced in the most efficient way for those who use, manage and provide care in the NHS.

Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

This has meant that the HTA panels can now focus more explicitly on health technologies ('health technologies' are broadly defined to include all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care) rather than settings of care. Therefore the panel structure has been redefined and replaced by three new panels: Pharmaceuticals; Therapeutic Procedures (including devices and operations); and Diagnostic Technologies and Screening.

The HTA Programme will continue to commission both primary and secondary research. The HTA Commissioning Board, supported by the National Coordinating Centre for Health Technology Assessment (NCCHTA), will consider and advise the Programme Director on the best research projects to pursue in order to address the research priorities identified by the three HTA panels.

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Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search, appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

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Glossary and list of abbreviations

Technical terms and abbreviations are used throughout this report. The meaning is usually clear from the context, but a glossary is provided for the non-specialist reader. In some cases, usage differs in the literature but the term has a constant meaning throughout this review.

Glossary

Exercise on prescription (EoP) refers to schemes in which a GP recommends exercise for health benefits. This is also known as exercise referral.

Physical activity/exercise These terms are used to denote bodily movement using energy. Physical activities may be in specific forms, for example, sporting activities or aerobics.

South Asian refers to people whose family origins are either in Bangladesh, India or Pakistan. They may have been born in the UK or elsewhere.

List of abbreviations

BEEP Bradford Encouraging
Exercising People [scheme]

CHD coronary heart disease

EoP exercise on prescription

GP general practitioner

HEA Health Education Authority

NIDDM non-insulin-dependent
diabetes mellitus

RCT randomised controlled trial

TRA theory of reasoned action



Executive summary

Background

Exercise on prescription (EoP) schemes have existed in England and Wales since the early 1990s; in national surveys, the number of schemes has been estimated at approximately 150–200. EoP schemes are based in primary healthcare settings; general practitioners (GPs) prescribe exercise as the preferred course of treatment for a range of conditions, including those related to coronary heart disease. In the wide range of models of EoP schemes, the key features from the patient perspective are a preliminary fitness assessment, followed by a recommended programme of physical activity (e.g. swimming, aerobics, dancing, gymnastics) over a period of weeks. There is a dearth of information specifically relating to EoP schemes and their actual and potential contribution to the promotion of physical activity in South Asian Muslim women.

Objectives

- To review the literature relating to EoP schemes and South Asian Muslim women to provide the theoretical framework for the investigation.
- To carry out a national survey of health authority districts with large South Asian populations in order to find out what schemes exist and what provision is made for these women.
- To undertake case studies of schemes in which provision is made for South Asian Muslim women and to note good practice and issues arising.
- To undertake and evaluate a pilot intervention programme with special provision for South Asian Muslim women.
- To make recommendations for good practice in EoP schemes.

Methods

A review was undertaken of selected literature related to activity and health, EoP schemes, South Asian communities and activity levels of South Asian Muslim women. A questionnaire was sent to health authorities with South Asian

populations of at least 0.5% to determine the existence of EoP schemes, the agencies involved and the key contacts. Questionnaires were then sent to GPs and leisure centres in areas where such schemes existed. Quantitative analysis of the replies was undertaken.

In five selected areas, interviews were conducted with each of the parties to the EoP schemes – GPs, EoP providers, leisure centres, South Asian Muslim women participating in the schemes and community workers. Qualitative analysis of the results was undertaken. In one area, an EoP pilot intervention programme was introduced, and interviews were held with EoP providers and South Asian Muslim women. Again, qualitative analysis of the results was undertaken.

Results

There are some EoP schemes in which special provision is made for South Asian Muslim women; however, in many no such provision is made. The perceived barriers to exercise for these women include access to facilities, cost, childcare facilities, cultural codes of conduct and language. Some of the general issues in existing EoP schemes are a cause for concern, including communication and cooperation between parties and between agencies and the community, monitoring and evaluation.

The pilot programme was seen as being successful both by the providers and the South Asian Muslim women who participated in it.

Conclusions

While the research indicated that many EoP schemes have clear protocols and procedures and excellent facilities and programmes, many others suffer from shortcomings that need to be addressed, including communications between all participating parties and clarification of procedures.

Consideration should be given to the needs of South Asian Muslim women, in the form of the use of local community facilities and the employment

of bilingual and sympathetic staff. Costs to these women should be kept as low as possible and consideration should be given to the provision of childcare facilities. To be effective, EoP programmes should be long rather than short term.

Recommendations for research

Further trials are needed with large samples, clear criteria for groups and intervention programmes, and with outcome measures at specific intervals up to 1 year. A further study should also be undertaken to try and establish schemes for South Asian Muslim women along the lines of the pilot

programme described, in which the value of the specific interventions for these women are assessed. In measuring the effectiveness of EoP schemes and in their evaluation, a variety of methods and measures should be used including health outcomes (physiological, behavioural) and process (procedures, cooperation between parties).

An investigation into the cost implications of EoP schemes set against cost benefits would be useful, including ways of funding such schemes. There is also a need to investigate the best ways in which exercise programmes could be promoted in different communities, including exercise as part of a holistic programme.

Chapter I

Introduction

Background

Exercise on prescription (EoP) schemes have existed in England and Wales since the early 1990s and, in national surveys, the number of schemes has been approximately estimated to be between 150 and 200. In EoP schemes, which are based in primary healthcare settings, general practitioners (GPs) prescribe exercise as the preferred course of treatment for a range of conditions, including those related to coronary heart disease (CHD). There is a wide range of models of EoP schemes, with the key features, from the patient perspective, of a preliminary fitness assessment, followed by a recommended programme of physical activity (e.g. swimming, aerobics, dancing, gymnastics) over a period of weeks. There is a dearth of information specifically relating to EoP schemes and their actual and potential contribution to the promotion of physical activity in South Asian Muslim women.

Objectives of the study

- To review the literature relating to EoP schemes and South Asian Muslim women in order to provide the theoretical framework for the investigation.
- To carry out a national survey of Health Authority districts in the UK with large South Asian populations to find out what schemes exist and what provision is made for South Asian Muslim women.
- To undertake case studies of schemes in which provision is made for South Asian Muslim women in order to note good practice and any issues arising.
- To undertake a pilot intervention programme with special provision for South Asian Muslim women and to evaluate it.
- To make recommendations for good practice in EoP schemes.

Structure of the report

Details of the study are presented in this report as follows.

- A literature review, described briefly in chapter 2, divided into two parts:
 - physical activity and health, including the more specific EoP schemes that are the focus of this research (chapter 3)
 - South Asian Muslim women, the specific target group in this research: in particular, their migration and health, activity levels, and barriers and constraints for participation in physical activity (chapter 4).
- A research study (the methods are given in chapter 5), with the results presented in three parts:
 - a national survey of EoP schemes in areas with high South Asian populations (chapter 6)
 - case studies of five EoP schemes (chapter 7) and their results (chapter 8)
 - a pilot intervention programme (chapter 9).
- Summary and recommendations (chapter 10).

A flow chart showing the progression through the project and relationship between the various sections is presented in *Figure 1*.

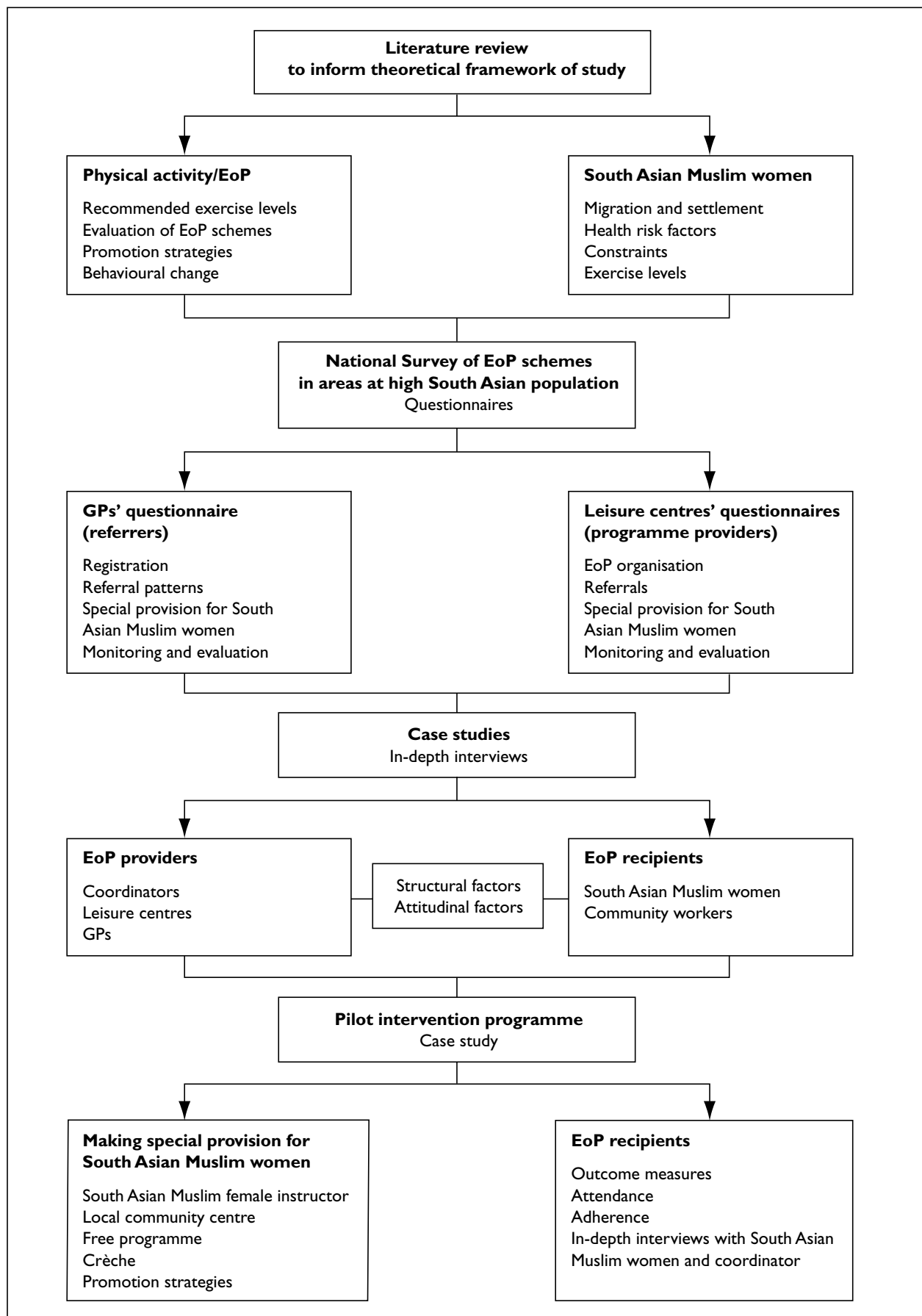


FIGURE 1 Flow chart showing progression through study

Chapter 2

Review of the literature

The aim of the review of the literature was to identify a theoretical foundation and framework for the research.

The databases used in the search were MEDLINE, HMIC [Health Management Information Consortium], the Cochrane Library, ERIC [Education Resources Information Centre], British Education Index and Sports Discus. The particular search terms used were:

- physical activity and health
- exercise and health
- physical activity promotion
- health promotion
- exercise on prescription
- exercise referral
- exercise behaviour
- South Asians and health
- South Asians and physical activity
- Muslims and physical activity
- barriers/constraints and physical activity.

All types of literature were considered, not just empirical controlled studies. Thus, qualitative studies together with reviews and discussion of

issues and ideas were included, as they contained much of interest in developing the theoretical framework for the study. Empirical studies alone were considered to be too limiting, in view of the limited number of studies focusing on the theme of this study. A systematic review of studies of EoP schemes was carried out recently;¹ this provided details of studies and showed that none of them were focused on South Asian populations. As the review in the present study was not confined to empirical studies, and because of its breadth, it was considered inappropriate to carry out a full systematic search as in the statement from the Quality of Reporting Meta-analysis (QUOROM) conference consisting of 30 experts. The criterion for selection was whether a paper added knowledge that would be useful for the theoretical framework. This framework included health and exercise promotion, EoP schemes, service delivery, constraints on exercise and South Asian Muslim women, special provision for South Asian Muslim women, and behaviour change. This was necessarily less precise than in systematic reviews of controlled studies; however, it allowed for a wider but more focused review, which would be more useful in this study.

Chapter 3

Physical activity and health

Health benefits of physical activity

The benefits of exercise were clearly identified by a working party of the Royal College of Physicians convened in 1989 to examine the scientific evidence on the benefits and risks of exercise.² These benefits are now widely recognised and form part of the rationale behind national and regional efforts to promote physical activity, such as those of the Department of Health's Physical Activity Task Force in 1995³ and the Health Education Board for Scotland's initiative in 1997.⁴

Regular physical activity can help maintain the optimum functioning of many of the body's structures, including the heart and blood vessels, the muscles and joints and the skeleton, as well as having a beneficial effect on certain metabolic processes, such as those involved in weight control.⁴ Different types of physical activity can affect different body structures to different degrees and can thus have different beneficial effects, such as improved stamina or strength, or improved range of movement.⁵ There is also evidence that physical activity can contribute to positive mental health, having a beneficial effect on mood and well-being, self-esteem and cognitive functioning.⁶

Regular physical activity can thus promote health by helping to maintain the physical and mental fitness required for the ordinary business of daily living.³ Martinsen concluded from his review of the evidence that participation, rather than the acquisition of fitness, is important for psychological gain.⁷ This could be of particular importance for older people, as regular physical activity can help to prolong an active and independent life.³

There is a well-established association between high levels of habitual physical activity and low incidence of CHD and stroke.⁸ It appears that for the least active and fit, the risk of suffering from heart disease is twice that for the most active and fit, which means that physical inactivity is as important a risk factor for the development of heart disease as hypertension, raised blood cholesterol or smoking.^{3,9} There is also some evidence that for those who do suffer a heart attack, there is a decreased likelihood of dying

for those who are physically active.³ This is of particular importance for the South Asian population of the UK, as the death rate from CHD in this community is about 40% higher than in the general population and, within this population, is highest for Bangladeshi men and Pakistani men and women.¹⁰

Obese people are twice as likely as those of normal weight to die before the age of 65 years.¹¹ Obesity is associated with an increased risk of developing heart disease, diabetes, arthritis and bronchitis, and exacerbates the effects of other diseases.¹¹ Regular physical activity as well as attention to diet can help to reduce obesity although, in the very obese, reduced exercise tolerance means that any physical activity must be very gentle. Regular physical exercise can also play an important role in maintaining a healthy weight.³

Diabetes is a condition that can lead to serious complications and even early death: for example, from kidney failure, CHD or stroke. Men with diabetes have a two- to three-fold increased risk of developing CHD and women a four- to five-fold increased risk.³ A regular, moderate amount of physical activity appears to reduce the risk of developing non-insulin-dependent diabetes mellitus (NIDDM) in middle age, as regular exercise helps to maintain insulin sensitivity. Also, in individuals already suffering from NIDDM, exercise can result in an immediate increase in secretion of insulin, which means that vigorous exercise can reduce the some individuals' need for insulin injections.³

Osteoporosis is a condition suffered by many older people, particularly women, in which loss of minerals from the bones results in weakness and an increased risk of fracture, particularly of the hip, wrists and vertebrae.² Regular weight-bearing exercise (in which the legs support the body's weight, as in walking but not swimming) has been shown to have a beneficial effect on bone metabolism in people of all ages.³ In younger people it can help to build up bone mass and strength, and in older people it can help to halt or reverse the decline in bone density that is observed with ageing, thus delaying the time at which the 'fracture threshold' is reached.²

The evidence for the beneficial effects of exercise in the prevention and treatment of mental illnesses is less unequivocal than that outlined above. However, it has been claimed that physical activity can improve personality and cognitive performance, including memory.¹¹ In his review of the effects of exercise on mental health, Glenister suggested that physical activity could alleviate symptoms of stress, anxiety and mild depression, and could thus form a useful part of the management of these conditions.¹²

It has also been claimed that physical activity can have beneficial effects in the prevention and treatment of diseases other than those mentioned above. Such claims are less well-established but include Fentem's work on the prevention of colon and breast cancer, the work by the Royal College of Physicians on the positive therapeutic effects in some respiratory conditions, including asthma, bronchitis and emphysema, and a beneficial effect in some rheumatoid arthritis sufferers.^{2,13}

How much physical activity is good for health? Current recommendations

Some authors, such as Blair and Connelly,¹⁴ have suggested that it is too difficult to specify recommended intensity or optimal doses of exercise. However, recommendations by experts, such as Sallis and Patrick,¹⁵ have been strongly supported and used in campaigns by organisations such as the Health Education Authority (HEA).¹⁶ Recommendations have included 20 minutes of vigorous intensity activity on 3 days per week, where vigorous intensity activity is defined as sustained, rhythmic large muscle movements at greater than 60% maximum aerobic capacity (VO_2 max) (approximately 70% of maximum heart rate). Subjectively, this means having a raised heartbeat, breathing hard and sweating; the types of exercise in this category include running, fast cycling, fast swimming, active football or rugby, squash, aerobics and heavy gardening.¹⁷

There is also evidence that positive health effects from physical activity can be experienced from an accumulation of short bouts (for example, 5 or 10 minutes) of exercise during the day, as well as from the longer periods of continuous activity that have been traditionally emphasised.¹⁴ It has been concluded that the major public health problem of physical inactivity is in the least active and fit 20–30% of the population and so, from a public

health point of view, it is most important to encourage this inactive part of the population to engage in some physical activity rather than none.¹⁸

More recent recommendations for the frequency and intensity of physical activity have, in the light of these new conclusions, tended to emphasise a more moderate message, recommending more moderate but accumulated exercise patterns. For example, in 1995 the US Centers for Disease Control and Prevention and the American College of Sports Medicine suggested that every American adult should accumulate 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week.¹⁹ Moderate intensity physical activity is defined as activity at between 40 and 60% of maximum aerobic capacity (VO_2 max). Subjectively, this means breathing slightly harder, having a slightly raised heart rate and feeling warmer but not being out of breath or sweating profusely; the types of exercise in this category include brisk walking, heavy housework, gardening, social dancing and exercises, cycling and gentle swimming.¹⁷ Vigorous intensity physical activity is as defined above.¹⁸

As a result of these more recent recommendations, the HEA in England and the Health Education Board for Scotland have taken the approach of promoting the concept of 'active living'. The new recommendation from the Health Education Board for Scotland is "to accumulate 30 minutes or more of moderate intensity physical activity over the course of most days of the week" and is intended to encourage the majority of the population who are sedentary to incorporate some physical activity of a moderate intensity into their daily routines.⁴ The HEA had a similar goal when they launched their Active for Life campaign in 1996. This represents a shift of emphasis in a message that is relevant to most of the population but is intended to complement rather than replace the previous advice for 3 × 20 minutes of vigorous activity.⁹

Promoting participation in physical activity

Influences on participation in physical activity

Sallis and Hovell described exercise behaviour as "the result of a complex causal web" of influences on physical activity.²⁰ There have been a number of theories, models and empirical studies in which

an attempt has been made to identify, classify and explain influences and determinants of participation in physical activity. These may be classified as follows; the psychological perspectives under attitude – behaviour, such as the theory of reasoned action (TRA) and self-efficacy theory; those that take a wider perspective and include social and environmental factors – for example, learning theory and constraints/barriers models; and others that take a behavioural change perspective and present processes or stages of change (transtheoretical models).

Theories and models stress different psychological factors: such as, attitude and intention to undertake certain behaviours (TRA; transtheoretical model of behaviour change), confidence in ability to take courses of action (self-efficacy), perceived self-competence to undertake action (Harter's competence motivation theory), and reinforcement (or not) of behavioural action (learning theory). Promotional models of physical activity are often based on interventions in attitudes, intentions, confidence, competence and reinforcement: for example, increasing knowledge, awareness and opportunity, and offering social healthy enjoyment outcomes. Self-efficacy beliefs have been found to be good predictors of physical involvement.^{21,22} Jackson and colleagues presented constraints in a hierarchical model of three categories (intra-personal, interpersonal and structural) with the former, which includes psychological factors, being the most proximal and powerful.²³ This hierarchical model was confirmed by Alexandris and Carroll,²⁴ with intrapersonal constraints distinguishing between participants in physical activity and non-participants. They also pointed to the importance of strength of motivation in overcoming constraints.

The transtheoretical model of behaviour change, or stages of change model as it is sometimes known, describes the different phases that an individual moves through during health-related behavioural change. The model suggests that the stages individuals move through in attempting to change their behaviour consist of:

- **precontemplation**, when there is no intention of making any behavioural change
- **contemplation**, when a change in behaviour is being considered
- **preparation**, when small changes in behaviour are being made
- **action**, when the individual is actively engaging in the new behaviour

- **maintenance**, when the change is sustained over time.

Buxton and colleagues²⁵ concluded from their review that there is research evidence for the applicability of this model to exercise behaviour and suggested that one of the major contributions of the model is its recognition of the dynamic nature of behavioural change.

This model has been used in health education materials for health professionals who are interested in promoting physical activity to their clients, with suggestions for different types of intervention suitable for clients at different stages, as well as by the HEA.²⁶

Advantages of promoting physical activity in the primary-care setting

The primary healthcare team is that group of people who provide the first level of healthcare in local communities and the first point of contact that individuals have with the NHS.²⁷ It has been suggested both nationally (for example, in the 1992 Department of Health's White Paper *Health of the Nation*) and internationally (for example, in the 1985 WHO programme *Health for All 2000*) that the primary healthcare team is well-placed to promote the health of local communities.²⁷ Promoting physical activity is one aspect of promoting health and, according to the Department of Health Physical Activity Task Force, primary healthcare has a role in the national strategy to promote physical activity.^{3,17}

The primary healthcare setting has been proposed as suitable for promoting physical activity for a number of reasons. From a public health point of view, one advantage is that primary healthcare teams are in contact with a large proportion of the population, with an estimated 70% of the patient population visiting their GP each year and 90% attending within a 3-year period.⁹ It is claimed that that GP consultation rates among the Pakistani and Bangladeshi populations of the UK are particularly high, with approximately one and a half times as many people from these communities consulting their GPs in a month compared with the general population.²⁸ It has also been commented that registration with a GP is almost universal among the South Asian population.²⁹

Not only do GPs see large numbers of patients but, it has been suggested, those individuals who attend GP surgeries most frequently are likely to

be those who are most physically inactive; thus, they represent that part of the population who it might otherwise be difficult to reach with health promotion messages relating to physical activity.⁹ Furthermore, Calnan and Johnson suggested that when individuals visit their GP they are often in a receptive frame of mind, perhaps motivated by their anxiety or fear of disease.³⁰

Another suggested advantage of the primary healthcare setting is that patients are more likely to give credence and respond to advice given by their GP than to advice from other sources.⁹ In their review of the literature on the significance of the GP in influencing health behaviour, Calnan and Johnson suggested that doctors were credible authorities who were trusted by their patients.³⁰ According to a survey carried out by the British Heart Foundation, patients said that firm advice from a GP to participate in more exercise was more likely to motivate them than the offer of £1000.³¹ The comparative value of health promotion advice from a GP is, of course, open to debate but it has been suggested that GPs can be effective in promoting healthy lifestyle changes in general and exercise in particular. For example, in their systematic review of the effectiveness of GPs in promoting lifestyle change, Ashenden and colleagues found that patients did respond positively to advice from their GPs to exercise more,³² and they concluded that general practice based interventions did show some promise in effecting small changes in behaviour. Another reason for choosing primary healthcare as a setting for the promotion of physical activity is that information and advice can be combined with other health promotion topics, for example, regarding diet and smoking, to give a less fragmented health promotion approach.⁹

EoP schemes

Introduction to EoP

In recent years, increasing interest has been shown in schemes in which GPs or other members of the primary healthcare team are involved in 'prescribing' exercise as a method of promoting physical activity. Such schemes proliferated across the country during the 1990s and take a variety of different forms. Reflecting this variety, a number of different terms have been used to refer to this type of physical activity promotion intervention, including, 'exercise on prescription', 'exercise by prescription', 'activity prescription', 'GP referral to exercise' and 'exercise referral'; however, these terms do not appear to have precise definitions.

In this paper, EoP will be used to cover the whole range of different types of scheme.

In the first national review of physical activity promotion interventions in primary healthcare in England, Biddle and colleagues, on behalf of the HEA, identified two main types of scheme based on who was responsible for managing the physical activity programme of the participant.³³ These were, first, practice-managed schemes, in which members of the primary healthcare team retain responsibility for the promotion of physical activity among their patients, and, second, leisure centre managed schemes, in which the primary healthcare team passes responsibility for the promotion of physical activity over to a local leisure centre or health club by referring suitable and interested patients.

In leisure centre managed schemes, participants attend their local leisure centre where, generally, they will first be assessed and then attend an exercise programme devised for them. The programmes usually consist of an exercise induction course of special sessions with a trained exercise leader, most frequently during normal working hours, that continues for perhaps 10–12 weeks. These sessions are available to participants either free of charge (or for the cost of a prescription), or at a reduced rate. When participants have completed the course, they are generally then encouraged to continue their involvement by taking out membership of the leisure centre or club at the normal price. In their review, Biddle and colleagues found that this type of scheme was usually initiated by the leisure centre, in an attempt to attract a new and previously untapped market, although there were examples of the NHS initiating this type of partnership scheme.³³

It was found that the leisure centre managed model was more common, with 72 schemes operating at the time of the review and a further 52 schemes planned.³³ In addition, there were 49 practice-managed schemes in operation, giving a grand total of 173 planned and active EoP schemes across England. Although leisure centre managed schemes were more widespread, the review authors pointed out that their estimate of the number of practice-managed schemes in operation might be low, as some schemes were more difficult to identify and appeared to attract less publicity, perhaps partly because they were less commercially oriented. EoP schemes were found in a wide range of locations, including

inner cities, redevelopment estates, middle-class suburbs and rural areas.³³

More recently, Chapman undertook a review of GP exercise referral schemes in England and found almost 200 in operation.³⁴ She suggested that even this was probably an underestimate because some local authority districts or boroughs may have been operating more than one scheme but did not always give details of all of them. Also, because only those schemes run by local authorities were included, schemes involving private health clubs would not have been included. This review also did not include any practice-managed schemes.

It is more difficult to estimate the numbers of people who might be participating in EoP schemes, as none of the national surveys has, to date, asked this question. Biddle and colleagues³³ suggested that practice-managed schemes have at least the potential for involving a large proportion of a practice population (an involvement of 15% was quoted in one example), whereas leisure centre managed schemes might involve fewer individuals (estimated at less than 1% of a practice population) because of the limitations set by the capacity of the individual leisure centre. In the national review for the HEA, it was found that the patients participating in schemes tended to be women and middle-aged. The predominance of women was attributed to the fact that leisure centre managed schemes tended to offer reduced-rate schemes only during normal working hours, although even in areas of high unemployment, most participants were female.³³

Most participants were found to have no symptoms of CHD. Many, however, had CHD risk factors, for example, they were smokers or had mild hypertension; the most common reason for referral was because the patient was overweight.³⁵ Fox and colleagues suggested that few participants were referred for CHD prevention, because both GPs and leisure centres were concerned about the risk of patients suffering a heart attack while exercising, and there was also some concern about the issue of legal liability.³⁵ In fact, it was suggested that most schemes did not have specific criteria for referring patients – the main criteria appeared to be willingness and ability to participate. It was also suggested that some GPs were probably using such schemes as a therapeutic option for psycho-social problems suffered by patients rather than for primary health promotion reasons. It was noted that some schemes were very successful at involving certain groups, including patients from some

ethnic minorities, in physical activity at leisure centres.³⁵

Effectiveness of EoP schemes

EoP schemes appeared to be popular with both GPs and participants alike. When considering the question of effectiveness of such schemes, however, Fox and colleagues concluded, “This is difficult to assess because of the lack of rigorous evaluation”.³⁵ Since this statement was made, as noted earlier, new schemes have sprung up all over the country, and the number of evaluations of individual schemes, particularly of the leisure centre managed type, both published and unpublished, rigorous or not, have also increased. Randomised controlled trials (RCTs) have now been carried out.^{36–38}

Riddoch and colleagues undertook a systematic review of the effectiveness of physical activity promotion schemes in primary care settings,¹ in which 25 UK empirical studies were identified; these studies included a variety of outcome measures and assessment methods, and both physical activity and follow-up periods varied, so a quantitative summary was impossible.¹ However, the majority of studies were reported to show some form of improvement in physical activity behaviour and in psychological and health factors after a specific period but the results were not really consistent. Adherence rates were disappointing, with levels of adherence weak in the studies. Eight studies from outside the UK were identified (five from the USA and one each from Australia, New Zealand and Germany). Again, the results were generally positive but limited. Riddoch and colleagues particularly noted the differences in the way in which schemes were organised when leisure centres were not involved and when they were; the use of an objective measure of activity levels in the study by Calfas and colleagues brought encouraging results.³⁹ Riddoch and colleagues¹ also reviewed the ‘grey literature’, which mainly consisted of internal evaluations. Although it was encouraging to see the inclusion of internal evaluations, they concluded that many were flawed in design, were selective in reporting positive findings and discussed these findings without reference to their limitations. Few such evaluations also used a psychological model of behaviour change and there were no large-scale trials. These authors also pointed out that it would be unrealistic to expect large-scale behavioural and activity level changes in people, and supported this by reference to large-scale studies. They also included their own report of three case studies, in order to assess a

wider aspect than the reviews. They suggested that the schemes had other benefits, which the controlled trials of effectiveness had so far missed. These benefits were of a social–psychological nature and included the impact on patients, primary care and leisure centre staff, and others closely involved in such schemes or with referred patients.

The Newcastle exercise project consisted of an RCT of methods to promote physical activity in primary care.⁴⁰ Methods included brief (one) and intensive (six) motivational interviews with or without financial incentives (vouchers), and the outcome measures of physical activity at 12 weeks and 1 year. The main conclusion was that both groups reported higher physical levels than the control group, and that the most effective intervention at 12 weeks was the most intensive with vouchers. However, even this did not produce longer-term adherence at 1 year, suggesting that short-term programmes may be of questionable value in the longer term. However, their conclusions have been criticised in electronic responses by a number of writers on two main grounds. First, all the groups in the study, including the control group, showed some improvement at 12 months and, second, the control group was not a true control group as there appeared to be some limited intervention (see responses at end of the paper – electronic *BMJ* website).

An experiment by Steptoe and colleagues on the effect of behavioural counselling in general practice for the promotion of healthy behaviours included exercise as one of the chosen outcome measures.³⁷ He concluded that behavioural counselling carried out by practice nurses, in terms of the stages of change model, led to improvements in healthy behaviours, including exercise at 4 and 12 months.

Framework for evaluating EoP schemes

Funnell and colleagues proposed a framework for evaluating health alliance schemes.⁴¹ They suggested that success depended on how well the alliance functions as a group (process), and their process indicators included commitment, community involvement, communication, joint working and accountability. Their outputs included service and environmental change, and skill development contact with the target group. The implications for EoP schemes included effectiveness measures, such as physiological, psychological and behavioural health outcomes.⁴¹ In published research on EoP schemes, it appears that relatively little process-based evaluation has

taken place and more emphasis has been placed on outcome measures. It is clear that the process indicators are more difficult to assess and require qualitative methods.

The publication of the National Quality Assurance Framework⁴² not only provided the framework for the operation of EoP schemes but, in doing so, provided the framework for evaluating and auditing such schemes. It provides a number of guidelines and indicators for the essential processes that can be evaluated and audited:

- selection of patients on to schemes
- physical activity assessment and intervention
- long-term physical activity and support
- professional competences for all parties
- monitoring and evaluation.

The Framework provides a comprehensive manual for EoP good practice and evaluation of that practice.

Implications of some features of EoP policy and provision for promoting physical activity

Biddle and colleagues³³ found that protocols were rare in their national review. However, protocols can help to ensure that the personnel involved are clear about their roles and responsibilities, thus ensuring that schemes are implemented properly and consistently. There is a sample protocol contained in the HEA guidelines on promoting physical activity in primary care; the suggested areas that should be covered include a mission statement, the aims of the intervention, the target group, the planned stages of development of the programme and the operation of the programme, including the role of the different personnel involved and the method of evaluating the scheme.¹⁶

In addition to the need for protocols, guidelines written specifically for the different personnel involved can also be useful. For example, some GPs are concerned about the issue of legal responsibility and evaluations of some EoP schemes have shown that not all GPs are aware of their legal liability.^{43,44} Written guidelines could be used to clarify issues such as these, as well as providing support for GPs (in addition to training), something which was identified as important by Swinburn and colleagues.⁴⁵

Guidelines for GPs could also include the criteria by which patients should be selected to participate in an EoP scheme. The criteria used

for identifying suitable patients is one of the key factors contributing to the success of schemes. Smith and colleagues⁴³ identified problems with referral criteria as one of the limitations of an EoP scheme that they evaluated in inner London. One of the changes made in the Oasis scheme in Hailsham that resulted in an improved participant completion rate was that the criteria used by GPs to identify suitable patients were made more specific.⁴⁶

Lord and Green listed the criteria that were used by GPs in Stockport for referral of patients to an EoP scheme.⁴⁷ In this scheme, the criteria were quite general and included any patient aged between 18 and 65 years whose health the GP considered would benefit from regular exercise. These were patients who were not already exercising regularly and who had no contraindications to exercise. It has also been suggested that patients could be selected according to their 'readiness to change'.^{36,48}

Since the initial draft of this document was written, a much-needed national quality assurance framework has been published by the Department of Health.⁴² It provides guidelines for the organisation of schemes, exercise/physical activity assessment and interventions, professional competences required by the different parties, monitoring and evaluation. The implications discussed above are covered by these guidelines.

Nature of service provision

In her review of factors affecting the adoption of exercise, Dunn concluded that the type and format of physical activity programmes was a factor influencing participation.⁴⁸ Browne suggested that exercise needs, above all, to be enjoyable,⁴⁹ and this appears to be recognised in many EoP schemes in which attempts have been made to offer participants a range of options for physical activity. For example, on the Stockport EoP scheme, an extensive range of options was offered, including aqua aerobics, badminton, bowls, cycling, dancing, keep-fit, walking, weights, yoga and trampolining.⁴⁷ In order to appeal to South Asian Muslim women, activities on offer could also include some specifically originating in that culture, for example, traditional dancing.⁵⁰ In order to make exercise options enjoyable, and to reduce the numbers of participants dropping out, it has also been suggested that options should be of moderate intensity.^{51,52}

As well as having a variety of types of exercise on offer, it is also important to consider where the

exercise takes place. For example, Iliffe and colleagues suggested that exercising at a leisure centre should not be the only option, as the perceived image of the leisure centre may deter some potential participants.⁵³ Ayres and Pocock described an EoP scheme in Devon in which the exercise sessions took place at a local college;⁵⁴ this appeared to be very acceptable to participants and there was a very low drop-out rate. Consideration could also be given to making exercise options available in settings in which South Asian Muslim women feel particularly comfortable, including the option of exercise at home.

Lewthwaite and Pilkington concluded from their evaluation that it was important for participants to have control over their programme and be able to change their options according to their changing needs.⁵⁵ In the evaluation of the Stockport EoP scheme, the high drop-out rate of participants was attributed in part to interruptions to the exercise routine.⁵² It was therefore recommended that interruptions to exercise classes because of, for example, school holidays, should be kept to a minimum.

Apart from factors relating to the exercise programme itself, another factor that influences the effectiveness of an EoP scheme is access. Issues affecting access, particularly in the case of leisure centre managed schemes, include availability of transport,⁵² availability of crèche facilities,⁵⁶ hours of operation,³⁶ and availability of translating facilities and written or other materials in an appropriate language.⁵⁰

According to the national review of EoP schemes, if participants are using facilities, it is usual for them to bear some of the cost, although in most schemes participants were offered the use of facilities at a reduced rate. This appeared to act as an incentive, and even in deprived areas these costs did not appear to prevent people from participating.³⁶

Methods of encouraging behavioural change

EoP schemes in which participants are supported in their attempts to change their behaviour tend to be more successful. Participants can be supported in a number of ways. First, participants require professional support as they change their behaviour. Lockwood and Goodwin suggested that initial support from the GP at the time of referral is not sufficient to sustain a participant through the

scheme but the on-going support of the fitness advisors and the motivational techniques that they used were critical factors in patient adherence to the scheme.⁵⁶ Nettleton and Corry suggested that, in their scheme, one of the factors that contributed to participants maintaining their participation in physical activity was the review with their GP at the end of the scheme.⁴⁴ Swinburn and colleagues⁴⁵ concluded that it was of great importance to follow up patients after their courses of exercise were completed; this was echoed by Clarke and Eves who suggested that providing a patient with a prescription for exercise can actually prevent them from making a permanent change in behaviour.⁵⁷ They suggested that support could be provided for participants by means of written material, a suggestion also made following the evaluation of the Stockport EoP scheme.⁵² Such material would have to be available in appropriate languages in any scheme that was designed to promote physical activity among South Asian Muslim women.

Apart from professional and written support, support for participants can also come from other participants on the scheme. Taylor³⁶ found

that participants classified as high adherers noted the social benefits of the scheme; other evaluations have also highlighted the benefits of social aspects of schemes in terms of encouraging adherence.^{52,55}

The stages-of-change model of exercise behaviour suggests that relapse is a normal phenomenon. Taylor found from his research that even participants who dropped out of the scheme at an early stage had changed in that they perceived fewer barriers to participating in exercise, which suggests that they might be likely to make another attempt at changing their behaviour.³⁶ It has been suggested that an effective EoP scheme will allow for relapse and for those who have dropped out to be allowed to rejoin the scheme.⁵³ It has also been suggested that the scheme duration should be extended from 12 weeks to 1 year, specifically to allow for relapses and to enable participants to re-enter the cycle of change.⁵⁵ Lord suggested that participants should be counselled about potential relapses, and encouraged not to view such relapses negatively but to move forward and resume their exercise programme if and when a relapse occurred, for example, after illness or holidays.⁵²

Chapter 4

South Asian Muslims in the UK

Background on South Asian communities

Muslims in the UK

Muslims are currently referenced as being the second largest religious group in the UK. There appears, however, to be some uncertainty as to the actual size of this population. Estimates vary, from Lewis's⁵⁸ three-quarters of a million to the Islamic Foundation Education and Training Unit's 1993 statistics,⁵⁹ which put the Muslim population of the UK at about 2 million (*Table 1*). The breakdown of these statistics suggests that the Pakistani population is by far the largest group, followed by the Bangladeshi group. One of the reasons for the variations in estimates is because national census forms before 2001 did not include questions on religious affiliation. Consequently, Muslims in the UK have been ascribed identities and measured by place of birth through statistics provided by the Labour Force Survey. Statistics reflect the selectivity of the migration process, highlighting that the majority of Muslims in the UK are of South Asian origin – specifically from Pakistan, Bangladesh and India.

TABLE 1 *Origins of the Muslim population in the UK*

Country of origin	Number	(%)
Pakistan	744,000	(37.20)
Bangladesh	216,000	(10.18)
India	151,800	(7.59)
Kenya	94,000	(4.70)
Uganda	45,200	(2.26)
Tanzania	36,200	(1.81)
UK and other Muslim communities	712,800	(36.26)
Total	2,000,000	(100)

Source: Islamic Education and Training Unit, 1993⁵⁹

For Muslims in the UK, Islam has increasingly become the key signifier of self and community. Religiosity is an important aspect of Muslim life and has contributed to the development of a distinct social world. Religion is also an important marker of ethnic difference. The recent research by the Runnymede Trust on Islamophobia indi-

cated threatened identities for Muslims as a result of religious discrimination,⁶⁰ and suggested that they suffer disproportionately from marginalisation and exclusion based on religious discrimination. Thus, for many Muslims, the vocabulary of religious values may help to furnish the descriptions of identity that individuals may use in secular contexts.⁶¹

South Asian migration to the UK

South Asian people are those whose families originated either in Bangladesh, India or Pakistan, whether they were born in those countries, the UK or elsewhere. Looking more specifically at the migration of South Asians, it is important to note that there are different trajectories that have developed in different historical contexts. Migration of South Asians to Britain has been a selective process, with the reasons varying between groups of migrants.

Labour migration of Muslims from South Asia was the first reason. Such movements resulted from colonial links, economic 'push and pull' leading to chain migration, and political factors. One of the largest groups of Muslims from the Indian subcontinent is from Pakistan. Pakistani migration can be explained in terms of economic push and pull.

Migration from Pakistan has been selective, with the majority of those categorised on the basis of their passports as Pakistani actually coming from Azad Kashmir. The Mirpur and Kotli districts of Azad Kashmir have been particularly significant in terms of migration and the region as a whole has contributed disproportionately to migration to the UK. Over half the population of some villages has now settled here. Other areas of Pakistan from where there has been significant migration are the Punjab and the North West Frontier.

Much of the literature on Pakistani migration in the closing decades of the 20th century indicates that it has been driven by the need to look for work (particularly from Mirpur). The 'push' factors were the mainly poor quality land and high unemployment caused by the agrarian nature of the economy and little industrialisation, with the 'pull' factors being active recruitment because of

post-war labour shortages in the UK. These migrants were the pioneers who became the source of 'chain migration'.

The reasons for migration solely on economic grounds are often overemphasised, with suggestions that the areas from which migrants come are the poorest. Traditions of migration have been under-emphasised. This has been particularly significant for migration from Pakistan. Here, pre-colonial society was highly mobile and the area had a long history of migration. The movement of people from one region to another was a tradition in this area, largely because of the subsistence agrarian economy. The nature of local economies meant that surplus male labour was not unusual, and economic migration was established long before British intervention in the area. Original pioneer migrants from Pakistan and Azad Kashmir joined Allied Forces during the First and Second World Wars. The Mirpur district (in Azad Kashmir) is well known for the high percentages of men who enlisted in the British Army, while traders from the North-West Frontier and rural areas of the Punjab are well documented as travelling to large centres to sell merchandise and to work for months at a time. Thus, rural to urban migration was the norm. Political upheavals during partition further induced mass migration and created refugees. Many Muslims moved from India to Pakistan, continuing a tradition of migration. In Azad Kashmir, the constant threat of war with India further displaced large numbers of people from Mirpur. Thus, it is clear that a culture of migration existed within these areas; hence, subsequent migration to the UK was a small conceptual jump for the majority of migrants.

There has also been an under-emphasis on the political dimensions of migration. Migration from Azad Kashmir in the late 1950s and early 1960s was increased by the construction of the Mangla Dam by Pakistan at the expense of the Kashmiri population. Refugees from the scheme followed the 'pioneer' migrants. Some Kashmiris who were displaced by the Mangla Dam consider themselves to be political refugees rather than economic migrants.

The majority of Bangladeshi Muslims in the UK migrated from Sylhet, which lies to the northeast of the country. Bangladeshi migration followed similar patterns to those of the Pakistanis. Indeed, pre-1972, these migrants were categorised as East Pakistani. As with the Kashmiris, Pathans and Punjabis, there was a tradition of migration within Bangladesh that was driven primarily by

economics. The Sylhetis joined merchant ships as cooks and galley-hands and, in the 1930s, began to settle in London. Post-1972, many Bangladeshi Muslims arrived in the UK as war refugees, fleeing from Pakistani genocide campaigns against them.

The numbers of migrants from South Asia increased rapidly in the 1960s, pre-empting the *Commonwealth Act* of 1962. There were continuing labour shortages in the UK, so the voucher system was introduced as a means of controlling immigration. Although migration became more selective, it continued to increase. The migration of single men ended with the *Immigration Act 1971* but this provided the impetus for family reunification. It is perhaps worth noting that these individuals did not enter the UK as 'foreigners' but as full citizens helping to rebuild a war-devastated country.

Once initial migration is complete, settlement of pioneer migrants, their households and the establishment of a community infrastructure within a new environment ensues. Settlement of community changes the context in which identities are formed and reformed. These contextual changes, whether local or global, transform identity systems through processes of redefinition. This redefinition takes place in response to the local and global context in which individuals and communities exist.

South Asian settlement

Like migration, the settlement trajectories of South Asian communities in the UK varied and, like migration, settlement was selective. In many cases there was a town-by-town pattern of settlement. National settlement patterns for most of the South Asian migrants are reflected in the economically driven aspects of migration and, consequently, the largest settlements are found in the old industrial centres of the UK. The percentages of Muslim populations across different regions are shown in *Table 2*.

Within these regions, it was the old northern industrial cities, such as Manchester, Bolton and Bradford based on textile industries, Birmingham and Leicester in the Midlands, and London in the South-East that were some of the main recipients of Muslim labour migrants.

Muslim women

In recent years, attention has been paid to the social exclusion of Muslim women. It has been argued that Muslim women suffer a double burden: not only do they share with other

TABLE 2 Numbers and percentages of Muslim population in different regions of Great Britain

Region	Population	(%)
East Anglia	23,200	(1.16)
East Midland	123,400	(6.17)
Northern	46,000	(2.30)
North West	210,000	(10.50)
Scotland	49,600	(2.48)
South East	905,000	(45.24)
South West	64,400	(3.22)
Wales	25,400	(1.27)
West Midlands	291,000	(14.53)
Yorkshire & Humberside	262,000	(13.08)
Total	2,000,000	(100)

Source: Islamic Education and Training Unit, 1993⁵⁹

disadvantaged groups the exclusions based in racial discrimination, economic deprivation and sexism, but they are also subject to the 'internal' disadvantage of being members of communities which often lay emphasis on exercising control over them. That is, fathers, brothers, husbands and (male) community (and religious) leaders may combine to prohibit Muslim women from actively participating in activities outside of the home.⁶² The effects of such exclusions and prohibitions can have many manifestations, including effects on personal health and physical activity rates, the latter being particularly low in this group.⁶³ However, while this is a common view of Muslim male–female dynamics, it is simplistic and the experience of many Muslim women belies it. The myth of the Muslim woman who lacks agency contributes to the social exclusion of Muslim women and their marginalisation from outside activities. This has implications for EoP schemes. These have the potential to raise participation levels but, in order to meet the needs of Muslim women, strategies have to be developed that overcome these difficulties and empower Muslim women to participate in EoP schemes. To do this requires an investigation into the actual condition and circumstances of Muslim women. This, in turn, is only possible if the specificity of the condition of Muslim women is recognised.

Muslim women share with other women issues of gender disadvantage and, with other women from ethnic minorities, issues of racial disadvantages and general questions relating to socio-economic deprivation. There are, however, three main features that make the position of Muslim women unique.

1. Muslim identity is now fairly well established in the UK and relies less on notions of countries of origin, as demographic change has meant that increasing numbers of ethnic minorities are born and schooled in this country. Also, Muslim identity has developed in response to global political events, which has impacted on communities in the UK.
2. Women who identify themselves as Muslims first are very conscious of the obligations, affiliations and responsibilities that their membership of these communities involves. For example, increasing numbers of young Muslim women wear the hijab (headscarf) as a badge of their affiliation. Thus, for this group of Muslim women, availability of space in which they are regulated by Muslim norms is important for their full participation in society.
3. The assertion of Muslim identity is used to combat cultural notions within South Asian traditions that tend to disempower women. Thus, the assertion of Muslim identity provides a means by which Muslim women are able to exercise their rights. This provides an alternative model of female empowerment within the ethnic communities that will prove more successful in reducing the social exclusion of this group of women.

These three features point to the specificity of the condition of Muslim women and the need for this specificity to be addressed. Initial evidence suggests that EoP schemes have the potential to increase participation rates in physical activity and lead to improved physical and mental health in these women.⁴⁷

In the 1997 HEA publication, *Physical activity: from our viewpoint*, the barriers identified in the research were highlighted as not being culturally specific.⁶⁴ The authors commented that quantitative research undertaken among the white adult population of England identified many barriers similar to those that they described as occurring among South Asian and black communities. The authors found that the differences faced by South Asian Muslim women were based on the importance they placed on Islam and being Muslim.

The health and activity of South Asian Muslim women

Health risk factors

Physical inactivity is a well-established risk factor associated with conditions such as CHD, hypertension, obesity and NIDDM. The South Asian

population may not be more obese than other ethnic groups but there is concern about central obesity, in which fat is deposited mainly on the abdominal area. Central obesity is known to be a risk factor for CHD,⁶⁵ and CHD is a major cause of death in the South Asian population. Research shows that CHD mortality rates in South Asian women are 43% higher than the national average.¹⁰ Major risk factors for CHD are smoking, high blood pressure, raised cholesterol levels and physical inactivity.

In addition to smoking, other factors have been observed in South Asian women.⁶⁶ Smoking and hypertension are not particularly common in South Asian women and average plasma cholesterol levels are not convincingly higher than in the general population.⁶⁷ However, the Bristol Exercise and Health Research Unit suggested, "The most plausible explanation is that the high prevalence of diabetes and central obesity in this population may be implicating factors".⁶⁸ This is supported by a study in Newcastle-on-Tyne in 1999,⁶⁹ in which the incidence of diabetes was found to be greater in Pakistani and Bangladeshi men and women than in Indians or Europeans. The authors concluded that there were important differences between Indians, Pakistanis and Bangladeshis, and that comparisons in which they were grouped together masked these differences. However, all three groups were disadvantaged over a range of factors compared with Europeans. Other research on South Asian women suggested that socio-economic factors associated with stress, such as employment, income and housing, are much higher in South Asians than in the general population.⁷⁰ Despite public health campaigns, Asian families lack awareness of the risk of raised cholesterol levels and the importance of a nutritionally sound diet; it has also been reported that food purchased by Asian families has a higher fat content than that purchased by other ethnic groups.⁷¹

The prevalence of diabetes is three to four times higher in the Asian population than in people of European origin; this is mainly NIDDM.⁵⁰ An analysis of mortality data in England and Wales for the period 1988–92 showed that, when compared with national rates, people originating from the Indian subcontinent (India, Pakistan and Bangladesh) suffered a 3.7-fold excess mortality from diabetes mellitus, with a 6.5-fold excess in men born in Bangladesh and a 4.5-fold excess in those born in Pakistan.⁷² The beneficial effects of physical activity are thus of particular significance for the South Asian community of the UK.

Low levels of physical activity

The health risk factors outlined above are further exaggerated by low levels of participation in physical activity among South Asian Muslim women.^{68,73} There has been some research investigating levels of physical activity among the South Asian population of the UK that suggests that this group, especially women, are less active than the population in general.²⁸ For example, when asked in an HEA questionnaire about participation in sports-based activities and general physical activity, Pakistani and Bangladeshi respondents reported significantly lower rates of involvement. The results of this survey also suggested that gender differences in the South Asian communities relating to participation in physical activity were much more pronounced than for the general UK population.²⁸ More recent, unpublished research has led the HEA to suggest that as many as 86% of Pakistani women and 82% of Bangladeshi women do not participate in enough physical activity to benefit their health (that is, they do not participate in at least 30 minutes of moderately intensive physical activity on at least 5 days of the week) compared with 68% of the general population, and about half of all South Asian women are sedentary compared with 24% of the general female population of the UK.²⁸

A survey by Verma and Darby⁷³ was based on a sample of different ethnic groups in Greater Manchester. The six ethnic groups selected were all non-European and had a national distribution. According to the results of this survey, there is a group (28.8%) of totally inactive women; Bangladeshis (48.9%) and Pakistanis (46.5%) were prominent in this group. The survey also indicated that women of all ethnic groups who would like to take part in physical activities have many constraints in common. South Asian women, particularly Pakistanis and Bangladeshis, suffer additional barriers imposed by culture and custom and, thus, many may be reluctant to participate in regular physical activity. The findings of a survey in a Birmingham city hospital, focusing on 72 Asian housewives, noted that South Asian women were the least likely to take regular exercise compared with the general population.⁷¹

Although it is difficult to compare the figures for levels of physical activity among South Asian Muslims by different researchers because of differences in the methods used, there does appear to be unanimous agreement that South Asian Muslims in the UK undertake less physical activity than the population in general. The

difference between the levels of physical activity undertaken by males and females is even more marked than the difference in the general population. The inescapable conclusion from this information, combined with the evidence regarding the effect of physical activity, is that promoting participation by South Asian Muslim women in physical activity is a goal that could potentially yield substantial benefits.

Research in South Asian and black communities in the UK indicated that factors influencing participation in physical activity were often very similar to those factors influencing the general population.⁶⁴ The main factor identified that appeared to motivate physically active people was enjoyment but other factors were mentioned, including habit, appearance, health, being a role model to children, and social benefits. Generally, even among the more sedentary people, there appeared to be a high awareness of the health benefits of physical activity and also a recognition of the social benefits. Perhaps more fundamentally, Rai and Finch found that, similar to the rest of the UK population, one of the main reasons given by South Asian people for low level of participation in physical activity was a lack of motivation.⁶⁴ They suggested that a reason for this lack of motivation was the high level of stress felt by this population "...which left people with the feeling of not wanting to do anything." Sources of this stress could include poverty, which is widespread in this community, and racism.⁷⁴

Barriers to participation

There has been some qualitative research carried out in the UK South Asian community in which the barriers to participating in physical activity have been investigated.^{64,68} One of the key findings from the relatively large study carried out for the HEA⁶⁴ was that there were no fundamental cultural or religious reasons for the prohibition of physical activity. Also, the main barriers to participation identified were very similar to those found from research in white populations, although some differences and requirements were highlighted.⁶⁴ Although the authors suggested that there were no fundamental cultural or religious reasons for the prohibition of physical activity,⁶⁴ Verma and Darby found that Muslim Pakistani and Bangladeshi women were influenced by the expected approval of other members of the community, including parents, religious teachers, siblings and friends.⁷³ They concluded from their research that religion powerfully reinforced the authority and behaviour patterns which appeared to reduce participation.

Many South Asian women live in traditional forms of extended families. Although they may not be living under one roof, other members of the family tend to live nearby. Each family member has formal duties. Women are often responsible for all aspects of day-to-day running of their homes and seldom have any time for themselves. In the Allied Dunbar National Fitness Survey,¹¹ it was suggested that lack of time was the most common barrier to increasing participating in physical activity. Rai and Finch⁶⁴ found this to be a common barrier for the South Asian population as well, with difficulties of combining home and work responsibilities, long working hours and care of young children all being cited as reasons for not undertaking more exercise. Hence, lack of time and burden of domestic duties and heavy family responsibilities may be the main barriers to willingness to participate in physical activity. There is a growing interest in promoting physical activity among South Asian Muslim women but researchers often ignore important factors, such as socio-economic status, poor housing, environment and access to health provision, and racism.

It must, of course, be recognised that when lack of time is cited as a reason for not participating in physical activity, this suggests something about the relative value of physical activity compared with other possible activities, as well as the 'busyness' of the respondent. The research by Rai and Finch⁶⁴ indicated that South Asians gave a low priority to physical activity, which held little appeal as a leisure activity to be pursued in spare time, especially when set against obligations to the family, which were considered to be more important than personal preferences. The research by Majmudar and colleagues⁶⁸ led them to conclude that the strongly held cultural view of women as homemakers was a factor that would make it more difficult to encourage South Asian Muslim women to leave the home in order to undertake some form of exercise. Research completed in 1996⁶³ focused on Hounslow's South Asian population. The main area of the study included the use of local leisure facilities by the South Asian community, with general questions on physical activity. Women emerged as a particular cause for concern. While they expressed interest in 'keeping fit', many barriers prevented them from participating in physical activity and making use of local leisure centres. Barriers included poor knowledge of English language, nervousness about dress, acceptance by other service users and possible injury.

Majmudar and colleagues found that the South Asian women who were most likely not to exercise on a regular basis were those over 24 years of age who were less fluent in spoken and written English.⁶⁸ In the view of these authors, this could mean that this group of women are less able to understand written information in English about exercise classes and less able to ask for help, and this could be an important factor preventing South Asian Muslim women from taking up exercise opportunities. Pharoah and Redmond,⁷⁵ writing about a project aimed at providing health promotion opportunities for elderly Asian women, suggested that older Asians often do not know what is available simply because of language barriers.

Roger and Arvind demonstrated that a large percentage of Bengali- (59%) and Urdu-speaking (54%) individuals attributed health to 'luck' alone, while Punjabis often believed that racism is a fundamental cause of ill health.⁷⁶ The analysis of the ethnic minority survey data by Blaxter, cited by Ahmed and colleagues,⁷⁷ found that a higher proportion of Asians and Afro-Caribbeans saw health as a matter of luck. A degree of fatalism was also noted in their health beliefs; religion being an important aspect of life for the people of South Asian origin explained this.⁷⁶

The self-perception of 'not being the sporty type,' which was identified in the Allied Dunbar National Fitness Survey as being one of the most common barriers to participation,¹¹ was also found to be important in the South Asian community in the research by Rai and Finch.⁶⁴ Self-consciousness about body size or shape was cited as a barrier to participating in activities at leisure centres, where it was perceived that the majority would have lean and fit bodies. Older people in the study considered that old age was a time to rest and slow down; exercise was perceived by them as tiring and, thus, did not seem an appropriate activity. Among older people there was the additional barrier of the idea of paying to participate in exercise as a separate activity, which to many seemed strange – their concept of physical activity was very much that it was a normal part of everyday life.

Majmudar and colleagues⁶⁸ stated that racial discrimination is a major factor that adversely affects the health of South Asian women. The fear of racial harassment can discourage women from, for example, jogging or walking alone, and also from using public transport, which they might need to use for formal exercise provision. It has also been suggested that actual or potential

experiences of racism can deter people from using sports and leisure centres.⁵⁰ Verma and Darby also found that racism acted as a constraint.⁷³

The research by Rai and Finch also identified some barriers to physical activity that were specifically related to the provision of facilities.⁶⁴ The main concerns were related to the cultural inappropriateness of facilities, for example, the lack of separate sex provision, the lack of privacy in changing areas and the lack of appropriate dress codes, together with actual or potential experiences of racism. In addition to these factors, the problems of having no-one to go with and, once there, the feeling of not fitting in because of the lack of other South Asian people, as well as being intimidated because of 'body image', were cited. Inaccessibility of facilities because of high costs were mentioned by some people, particularly those who were unemployed or on low income. This could be significant for South Asian women, as research shows that only a third as many Pakistani and a tenth as many Bangladeshi women are in paid work compared with other women in the UK and, in general, this community suffers from a high level of poverty.⁷⁴ Fears about personal safety were also mentioned as a factor that could prevent participation in physical activity if it involved travelling to a leisure centre or if the exercise took place in a public place, such as a local park. Lack of crèche facilities, inaccessibility because of distance or lack of appropriate transport, and inconvenient opening hours were also factors that have been identified as preventing people from using facilities more. Pharoah and Redmond suggested that a problem for South Asian Muslim women might be the lack of exercise classes held in community centres or other familiar venues, as well as the lack of information in their own language about available opportunities.⁷⁵

Strategies for promoting participation in physical activity by South Asian Muslim women

The Department of Health's Physical Activity Task Force³ identified several 'special groups' whose needs would have to be considered, including ethnic minorities. In response to this, the HEA issued guidelines for promoting physical activity amongst black and ethnic minority groups.⁵⁰ These recommended four general principles of equity: first, a wide breadth of provision especially giving older people a range of opportunities; second, coherence, which will come from alliances of individuals and

organisations working together to give high priority to promoting physical activity among ethnic minorities; third, development of long-term, well-funded strategies and programmes based on good practice; fourth, use of local data to determine the needs of people of black and ethnic minority groups. The HEA guidelines also suggested that, apart from the general principles that should be followed for effective health promotion, there are a number of specific principles which need to be applied.^{27,78}

- Involve people from black and minority ethnic groups in an on-going consultative process to develop and evaluate programmes.
- Develop and offer a range of approaches, interventions and options which best suit the needs of people from black and minority ethnic groups.
- Involve respected and valued members of black and minority ethnic society as role models or alliances.
- Use a variety of settings that are appropriate to the targeted communities, for example, community centres, gurdawars, mandirs, mosques, churches and health centres, as well as giving consideration to home-based schemes.
- Ensure that advice givers are knowledgeable, skilled, consistent and confident.
- Tailor programmes specifically to a group's circumstances, addressing the cultural, religious, and socio-economic barriers that hinder the capacity for people from black and minority ethnic groups to participate in physical activity.
- Consider the provision of transport to and from the selected venue for participants.
- Create a climate that combines socialising with exercise.
- Celebrate successes and share with people from black and minority ethnic groups as well as purchasers, providers and agencies involved.⁵⁰

Summary of literature and implications for the study

- The benefits of physical activity have been well documented, and are now widely recognised and promoted by a number of organisations. Exercise has a particular benefit in reducing risk factors related to CHD, diabetes, obesity, osteoporosis, stress and mental illnesses. South Asian populations are more likely to suffer or die from these risk factors than the white majority population.
- Currently, there are two main recommendations related to the amount of exercise; first,

20 minutes of vigorous exercise on 3 days per week and, second, 30 minutes or more of moderate exercise on most days of the week. Levels of physical activity in a large percentage of the population are below the recommended levels and are generally lower in South Asian women than in the general population. Hence, South Asian women are a target group for promotion of physical activity schemes. As this target group's activity levels are low, the second recommendation is the most appropriate in EoP schemes.

- South Asian Muslim women face many of the constraints of the general population, particularly related to gender, low socio-economic status, and access to health and leisure provision. However, they also face other constraints related to language, religion, customs and racism. Specific provision is required for South Asian Muslim women, for example, women-only sessions.
- There are a number of theories and models that attempt to identify and explain influences on participation in physical activity. These can be classified into three types that can and have been used in research and health promotion.
- The primary care setting is a suitable place for health promotion including exercise referral.
- There are an increasing number of EoP schemes. There are two main types – leisure centre managed, the most common, and practice based. Many schemes did not appear to have adequate written protocols, procedures and evaluation.
- Research into the effectiveness of EoP schemes does show some improvement in physical activity behaviour and in psychological and health measures, often after only a short time. However, there is no real consistency and adherence rates for longer periods, for example, 1 year, are low. There are benefits that controlled trials of effectiveness have not normally considered and which impact on all parties involved in such schemes.
- A framework for evaluating schemes has been suggested and includes process as well as output indicators. This could include commitment, communication, cooperation, service delivery, and individual development as well as health outcomes. The National Quality Assurance Framework⁴² gives a comprehensive framework for developing good practice and auditing and evaluating the practice.
- The benefits of the appropriate type and amount of exercise are undisputed and the promotion of exercise in the primary care setting is regarded as a suitable context.

However, the effectiveness of current EoP schemes is questionable in terms of medium- and longer-term adherence to exercise patterns. The controlled experiments have limitations, particularly in relation to not evaluating the processes of the scheme and other effects on the patients and other people in the scheme from general practice to leisure centre staff. The results of effectiveness studies may be related to the sample population, many of whom are in the pre-contemplation stage and are the least motivated of the population. These people may need special provision in the intervention to overcome motivational problems. There may be more success with those in the contemplation stage. Expectations may be unrealistic and too high. It may be worth placing emphasis on the actual numbers of people who show an improvement in physical activity levels, because an improvement for even a small number of people may be considered worthwhile. For the case studies and pilot intervention, these issues suggest that a more triangulated approach should be adopted with qualitative methods being used.

- It is not disputed that South Asian Muslim women are at risk and are a suitable target group for EoP. However, they are, in general, a low exercising group and face constraints,

some general to the whole population and others more specific, such as language. The implications of this are, within the survey, to try to identify monitoring of South Asian Muslim women and any special provision being made and, in the case studies, to identify constraints on participation and good practice to overcome them. This knowledge can then be used in the pilot intervention programme: for example, the use of dual language assessors, instructors and researchers.

- Theories and models to identify influences on participation in physical activity and stages of exercise behaviour have been found to be useful in health promotion and research. Of particular use are psychological measures, such as self-efficacy, models of constraints, and transtheoretical theory. The latter will be useful in the intervention programme to identify the stage at which the patients are referred, and to see if they can be moved to the next stage through the influence of the programme. General self-efficacy and constraints questions on the effectiveness of the pilot programme should be supplemented by specific questions for South Asian Muslim women, taking into consideration, for example, their customs, religion, difficulties of access to provision, and other constraints already identified.

Chapter 5

Methods used in the research study

The research work was carried out in three stages according to the aims and the original brief. The first stage was to see what schemes existed in areas of high South Asian population, and whether any special provision was made for South Asian Muslim women in particular. This would give the background for, and assist with, the selection of case study schemes in the second stage of the research study. The methods used in the first stage were questionnaires to health authorities, GPs, and leisure centres. This survey was an information-seeking one and, although there were questions on monitoring and evaluation, no attempt was made to assess the effectiveness of schemes.

The aim of the second stage of the research was to examine case studies of schemes in which provision for South Asian Muslim women was being made from the points of view of those involved in the schemes – South Asian Muslim women, GPs and service providers (organisers/coordinators, leisure centre staff). As the aim was to draw out issues and what were perceived as good or bad practices from different viewpoints, the chosen methods were in-depth interviews with the various parties and analysis of qualitative data. It was not the intention to evaluate the schemes from objective effectiveness criteria as in RCTs but to present an understanding of the schemes' value from the perspectives of the different parties – service providers and recipients.

The third stage was the intervention stage through action research in a specific scheme. The aim was to either set up or use existing schemes and to put into practice specific provision for South Asian Muslim women, incorporating the lessons that had been learned from the case studies. Originally, the plan had been to have a larger intervention programme in more than one scheme in different health authorities. However, cessation of funding enforced a necessary curtailment of the intervention programme. Thus only one pilot intervention programme for which arrangements had already been made was carried out. This pilot scheme was more limited than intended because of time constraints caused by the funding restrictions. It was intended to use both quantitative and qualitative data to evaluate the schemes. The literature review showed that physiological

measures (e.g. weight, blood pressure), psychological and behavioural measures (e.g. self-efficacy, stages of exercise behaviour, constraints), together with qualitative data to see whether the recipients were satisfied, were appropriate to evaluate the pilot scheme. Further details of the methods are given later in chapter 9.

The survey

The aim was to carry out a national survey of health authorities with South Asian populations of at least 0.5% in order to determine the existence of EoP schemes, some details of how the schemes operated, any special provisions made for South Asian Muslim women, and the monitoring of patients and evaluation of schemes. In all, 97 districts were identified with the selected level of South Asian population within the boundaries of 66 health authorities. First, it was necessary to contact the health authorities to find out whether there were any EoP schemes and, if there were, the names of the key contacts. Second, where such schemes existed, it was essential to identify the GPs and leisure centres involved. Thus, at this stage, an initial questionnaire was sent to the 66 health authorities; then two more detailed questionnaires were sent, one to general practices and the other to leisure centres or agencies carrying out the exercise programmes. The aim of the initial questionnaire was to obtain basic information on key contacts in order to locate the appropriate people to whom the more detailed questionnaires should be sent. Information was requested on the existence of any EoP scheme, its name, a contact name and address, and details of other parties involved, such as GPs and leisure centres. Many of these questionnaires were returned incomplete and telephone calls and reminders were necessary to establish this information. Even then not all the health authorities replied and of the 66 health authorities, 47 (71%) replied, 33 (70% of returns) had EoP schemes and 14 (30% of returns) had none.

There were two different detailed questionnaires – one for GPs and the other for leisure centres (see appendix 1). Both were discussed with representatives from four health authorities and both were piloted in one health authority by asking ten GPs

and four leisure centres to complete them. The purpose of the pilot study was to assess the appropriateness of the content and wording of the questions. Minor revisions were made based on the pilot study.

The GP questionnaire was then sent to 137 GPs in 33 health authorities. The main questions related to referral patterns, including whether there were any special provisions for South Asian Muslim women, and monitoring and evaluation. The second questionnaire was sent to 58 leisure centres and those operating the activity part of the schemes. The main questions related to the organisation of the scheme, the patients who were referred, special provisions for South Asian Muslim women, exercise programmes, monitoring and evaluation. These areas for questions had been identified from the literature review. The analysis of the responses to the questionnaires was through frequencies as this was adequate to provide the information required.

The survey stage of the research presented an overview of the range of the schemes available to South Asian Muslim women. Based on the questionnaire results and informal evidence from telephone calls and contacts in the schemes, the research team were able to select schemes for the case study stage from areas with high proportions of Pakistani and Bangladeshi populations where some provisions for South Asian Muslim women were being made.

The case studies

Qualitative research design was used to explore in depth the selected schemes within five health authorities as a way of understanding their actual and potential value from the perspective of South Asian Muslim women and community workers, as well as from the viewpoint of the EoP service planners and providers. The interviews allowed the South Asian Muslim women to give their opinions of their experience of the EoP schemes while indicating their beliefs and values. Interviews with key individuals in the EoP schemes gave valuable insights into the running of the schemes and their perspectives of the barriers to exercise for South Asian Muslim women.

Scheme selection

The selection of schemes for the case study stage of the research built upon the results of the survey discussed above. From the survey it was possible to identify areas of high South Asian population,

health authorities who ran EoP schemes, GPs who referred patients to EoP schemes, and leisure centres with special provisions for South Asian Muslim women. Not all the schemes in the survey included all the above criteria: that is, not all leisure centres running EoP schemes in areas of high South Asian concentration indicated that they had made special provisions for South Asian Muslim women. The schemes selected had made some provisions for South Asian Muslim women, although not necessarily all those that were possible, but they were all potentially able to give good examples of good practice and provide insights from both providers and recipients.

The five health authorities chosen, and the names of their schemes, were:

- (a) West Pennine Health Authority: 'A Prescription for Exercise'
- (b) Bradford Health Authority: 'Bradford Encouraging Exercising People' (BEEP)
- (c) Leicester Health Authority: 'Active for Life'
- (d) East Lancashire Health Authority: 'Fitness for Life'
- (e) Birmingham Health Authority: 'Exercise on Prescription'.

Data collection

Each case study focused on a single EoP scheme. Four types of data were collected.

1. Availability of EoP data – the intention being to identify uptake by South Asian Muslim women.
2. In-depth interviews and/or focus groups with South Asian Muslim women.
3. Interviews with key workers at the local Pakistani and Bangladeshi community centres.
4. Interviews with service providers, such as scheme coordinators, referral officers, leisure centre managers, health and fitness officers, GPs and practice managers and nurses, with a view to exploring their perspectives on EoP service provision and referral practices.

Theoretical sampling determined the groups of people for interviews. Data collection varied according to the specificities of each scheme, by which is meant that the people interviewed depended on the organisation of the scheme. Overall, a multi-method approach was employed using interview schedules as a guide (see appendix 2).

Interview sample

EoP providers

This group included EoP coordinators or organisers as providers (5), GPs as referrers (10) and

leisure centre staff as executors (8). Initial interviews were carried out with all five schemes' EoP providers. They were able to identify leisure centres and GPs. However, with the leisure centres and GPs, staff had to be both available for interview within a limited period and willing to be interviewed, so for these groups the individuals selected were a convenience sample. The interviews were of several types: informal discussion and semi-structured interviews on a one-to-one level or small group discussions. Most people agreed for the interviews to be recorded, although one EoP provider expressed a preference not to be recorded. It was very difficult to arrange a time to meet the GPs and, in most cases, they were happier to give a few minutes to answer questions over the telephone. In many cases, it was the practice nurses or practice managers who provided the information. None of these interviews were recorded. Interview schedules as guidelines are presented in appendix 2.

EoP providers were asked for general information relating to the background of their EoP scheme, the composition of EoP referrals, the referral of South Asian Muslim women, special provisions for South Asian Muslim women, promotional literature, problems of recruiting South Asian Muslim women, opinions on improvements in services for South Asian Muslim women, and opinions on the importance and benefits of EoP schemes. In addition, EoP providers were asked to help with identifying South Asian Muslim women on the EoP schemes and community centres in areas of high Pakistani and Bangladeshi settlement.

South Asian Muslim women and community workers

Methods of identifying South Asian Muslim women on EoP schemes and community workers in the area varied according to the research area but all were identified through the coordinator or leisure centre staff. In all, 35 South Asian Muslim women were interviewed who, at the time of the research, were on the EoP schemes. The women were approached and asked whether they would be willing to take part; those who agreed were interviewed. Thus, the individuals selected were a convenience sample. The South Asian Muslim women ranged from those who had started their prescriptions to those who were nearing completion. The ages of these women also varied. They were asked questions relating to access to information, health, the leisure facilities and, specifically, the EoP scheme. The intention was to record all the interviews but many South Asian Muslim women did not consent to this and,

consequently, their responses were noted down. Seven community workers were also interviewed.

Interviews

The framework of the interview schedules was developed from the literature review to obtain the perspectives of the key personnel involved in EoP schemes – the providers and the recipients. The framework questions provided the starting point for responses from which further questions and probes followed. Questions were open-ended to allow the respondents to develop their perceptions. Questions related to EoP provision and constraints to South Asian Muslim women's participation. The theoretical stance was firmly within a social action and symbolic interaction perspective,⁷⁹ which takes the view that people construct meanings about their own and others' situations, and define and base their actions upon those meanings. The researcher's approach is to identify these constructions and meanings of the social world, and try to understand and represent them from their point of view in the researcher's account. This accepts that there are different and multiple realities of actions and events and made it important to obtain the perceptions of the different parties involved in EoP. This form of triangulation was undertaken to include EoP coordinators, GPs, leisure centre staff, South Asian Muslim women and community workers.

The methods of analysing the interview data were similar to those advocated by Jones⁸⁰ (although full cognitive maps were not used) and Pope and Mays.⁸¹ The five stages of the framework approach – familiarisation, identifying, thematic framework, indexing, charting, mapping and interpretation – were basically followed. In the familiarisation phase, the tapes (when used) were listened to a number of times and the field notes (in place of tapes) were scrutinised over and over again. In this way the researcher became immersed in the data. At the second stage, all the key issues, key constructs and themes were identified by indexing at the side of the transcripts or notes of each individual interview. At the third stage, the key constructs and themes were drawn across the interviews for same group of respondents: for example, South Asian Muslim women were kept together. This was done using the constant comparative method and then cross-referencing. At the next stage, charting, charts were not drawn up. However, in their place, summaries of the themes were illustrated with examples of evidence from the actual first-order constructs of the respondents.⁸² These were reduced when there were a number of quotes

on the same themes by selecting one or two to reflect the perceptions of the respondents. In the final stage, mapping and interpretation, final categories and explanations were decided upon. Similarities and differences between the themes were noted, and the formation of the researchers' second order categorisation was decided,⁸² for example, the selection of structural and attitudinal barriers, as formal organising concepts for all the interview data.

Actions were taken to control the quality of the qualitative analysis that fitted the Mays and Pope criteria.⁸³ At each stage, the data were discussed by the three members of the research team to check the constructs, themes and examples, and that the evidence reflected the themes and categories. Drafts of the case studies analyses were given to a group consisting of academic researchers and health professionals for comment. They were also sent to the EoP coordinators of the case studies areas for comment. These methods can be seen as error reducing. The triangulation approach presents viewpoints from different perceptions and can be viewed as giving a more comprehensive perspective on EoPs. In this study, the different

groups of people do show a considerable amount of agreement on some issues, for example, constraints on South Asian Muslim women.

The pilot intervention programme

The aim was to set up a programme with special provision for South Asian Muslim women and then to evaluate the value of this scheme. It was carried out through action research with researchers working with the organisation. Leeds Leisure Services, through a unit called Leeds Health Focus, was selected to carry out this programme as they could respond quickly to establishing a programme. The evaluation of the research involved interviews with the organisers and South Asian Muslim women on the programme, and outcome measures from the physiological and psychological tests and questionnaires. The details of the methods are presented later in this report (see chapter 9) under the pilot intervention programme as it was considered they fitted better in the description of how the scheme was established and carried out.

Chapter 6

The survey results

Leisure centres survey

Organisation of schemes

In all, 32 (55%) leisure centres located within 18 health authorities responded and all were involved in EoP schemes. The titles of the roles of those who completed the questionnaire varied, for example, health and fitness adviser, exercise referral officer, EoP scheme coordinator, but their common function was to provide a consultation service for patients who were referred to them by either GPs or community health officers.

All the schemes were set up between 1992 and 1998, though seven respondents did not know or did not answer this question. The initiative for introducing the schemes came from either, exclusively, leisure departments (6), health authorities (6), general practice/primary care centres (2), or, more usually, a combination of any two or three of these (14); four did not answer this question. It is clear that the schemes involved a number of organisations, health authorities, health promotion units, general and primary care practices, leisure departments and their sport development or fitness and activity units, and leisure centres. There were various models of organisational structure – and no single model prevailed – but it was common for the health authority or health promotion unit to liaise with general practices and the leisure department or leisure centres, although in some cases, general practices linked directly with leisure departments or centres.

The replies suggested that both leisure departments (8) and health authorities (7) separately and jointly (6) were the chief sources of funding, although three other sources were suggested. These organisations often obtained initial funding through special grants, for example, inner city schemes or various health scheme grants. They were often continued on limited budgets through the normal channels. Many of the schemes relied on the patients paying for programmes or activities, and sometimes for assessment. Some schemes offered an initial programme (often limited to 10 weeks) free. There were a wide variety of methods of charging: for example, by session, programme, activities, and various packages. The cheapest charge per session was £1.00 and

the dearest £2.60, while assessment charges were £11.30 in one scheme and programmes cost £60.00 in another.

The number of general practices linked to a scheme varied enormously from less than five (4) to over 70 (2), with some schemes stating that all general practices were given the opportunity to take part. This did not mean that all general practices actually took part or that, when a practice did take part, all the GPs in that practice used the scheme. It depended on the individual interests of the GP. Eight practices did not know or did not answer (see general practices results, page 27). The number of leisure centres linked to a scheme also varied, from one to 14, with seven not knowing or not responding; this clearly depended on the number and size of centres in an area located near GPs.

As to whether a scheme had a written description or protocol and how it was publicised, it is worth noting that at 15 centres there was a written description, at five there was not, and others did not know (2) or did not answer this question (10). The negative response might suggest that the responder did not know whether there was a written description or not. Most of the respondents indicated that general practices advertised their scheme, as did many leisure centres and health promotion units. Other organisations were also mentioned, such as libraries, community centres and a local university. Unlike the health and leisure organisations, these organisations were not the initiators of the schemes or involved in their running but were used as institutional agents for advertising as locations where people sought information on a number of topics.

Referrals

An attempt was made to find out how many people were registered on the schemes and how many had completed a programme in the last 3 years, which would give some idea of adherence and attrition rates for exercise and activity programmes. However, 19 respondents did not answer this question, in some cases because the statistics were not readily available or evaluations were incomplete. Of the 13 who did reply, two were unable to give either the registered or

completion figures. The low number of positive returns raises the question of the adequacy of the monitoring procedures in many areas. There were two schemes with completion rates for each year of 30% or less, nine of 31–50%, four of 51–70%, and eight of 81–100%. The latter group included one centre that recorded a 100% completion rate but with only four referrals in 1998 and eight in 1997. Completion rates varied enormously between centres: for example, one had rates of 32% and 26% over 2 years, while another had rates of 87%, 90% and 82% over 3 years. The numbers of people registered also varied enormously. Although the centre that had only four and eight referrals per year over 2 years was by far the lowest, there were four other centres with less than 100 referrals per year in more than 1 year, and there were four recording 250 or more referrals per year, with one claiming 1275 and 1800 referrals per year over the last 2 years.

The percentages of patients from ethnic minority groups were less than 5% in 16 cases and less than 20% in three cases; two centres replied that there were over 31%, while 11 did not know or did not answer the question. Of the referrals, 15 centres responded that less than 1% were South Asian Muslim women, while at four centres the figures were 7% or less; the respondents from 13 centres did not know or did not answer the question. When asked how many South Asian Muslim women were currently registered on programmes, 12 centres had none, six had between one and four, one had 15 and another had 60; respondents for 12 centres did not know or did not answer. The numbers in the latter categories in each of these cases (34–40%) may be indicative of lack of monitoring of ethnic minority groups. At only seven centres (22%) was any special provision made within the scheme for South Asian Muslim women; the respondents at 17 centres (53%) stated there were no special provisions of any kind and at eight (25%) they either did not know or did not answer the question. One centre catered specifically for South Asian Muslim women in a number of ways, by providing women-only gyms, South Asian instructors, translators, special counselling, a transport service, specific activities and promotional material in ethnic minority languages, but this was an exception. At other centres they provided either women-only gyms or specific activities for women, such as swimming, saunas and aerobics. It should be remembered that although all centres were located within health authorities with a South Asian population of at least 0.5%, the actual location of a centre may not be within easy reach of such a population.

Programmes

A majority of the EoP programmes lasted for 10–13 weeks (19, 62%), three for less than 10 weeks with one as little as 4 weeks, while the remainder (5) lasted for 4–8 months; one response was that the programme was ‘on-going’ and, for four centres, no answers were given. Patients referred to the programmes did have the opportunity at many of the centres to carry on exercising, although sometimes conditions or charges changed. They were also offered more than one session per week, although the take-up depended on the patients.

Once registered on the scheme, referred patients at 25 centres were given advice or counselling to help them choose appropriate activities but it is of some concern that such advice was not given at three centres; respondents at four centres did not answer this question. At some centres, further advice was offered during or at the end of the programme. At the end of the programme, some referred patients were encouraged to continue with the exercise by special offers; for example, one centre offered 2 months’ free membership and others offered special schemes or charges. At only 16 centres (50%) were medical or fitness assessments always given at end of courses, while at seven centres they were usually given. Respondents from many centres did not indicate whether they gave advice or assessments or did anything to encourage continued participation. This certainly raises issues relating to their function and role in delivery and in future participation.

A wide range of activities was covered in the schemes, depending on the facilities, instructors and patients. The main reasons for not including specific activities were related to time, resources, facilities, staff or finance. There were also references to risk factors for patients.

An attempt was made to see if there was feedback from centres to GPs. Although one centre sent a detailed report on each patient containing the results of the fitness appraisals at the start and end of the 10-week programme, plus details of the programme and comments from both staff and patients, and another sent assessment test results at 10 weeks, 6 months and 1 year, these were the exceptions. Two other centres returned some details and two others stated they only returned such information if requested. Responses from some centres gave no indication that they gave any feedback at all, which suggests that they may not have given any. This meant that a GP had to rely on the patient returning for a

consultation and reporting on the scheme without any official assessment results. The modes of feedback were by special forms, in writing, by telephone, or a combination of these; one centre stated they had quarterly meetings. Five centres gave no answers.

Reference has already been made to monitoring or lack of it. Only 15 centres (47%) checked whether referred patients took up the scheme, ten (31%) gave a definite 'no', and the remaining 22% did not know or did not reply. The usual method of auditing take-up was for referral officers to receive copies of the prescription and to contact non-attenders but, in one case, although a referral form was received, no contact numbers or addresses were given, so contact could not be made. It would appear that when referred patients were not known to a centre, contact could not be made and, in many cases, nothing was done about those who did not take up the scheme. If a GP does nothing, which appeared to be the case in many instances, then a patient may miss out on the opportunity for an appropriate remedy. This raises further questions about monitoring.

Monitoring and evaluation

Only 17 schemes had been evaluated, with 16 having had formal reports, according to the centre responses; four schemes had not been evaluated and 11 did not know or did not reply. A variety of methods were used in the evaluations. These included patient questionnaires or interviews, GP questionnaires, exercise instructors' questionnaires or interviews, and yearly evaluation reports. The evaluations were carried out by the centres, leisure departments, health authorities or, in one case, a local university. Respondents from 17 centres either did not know or did not answer whether a report would be produced in the future. It appeared that evaluations were not built into some schemes. A final question asked respondents to give any other important features of their schemes. Examples of the responses are given below.

"It is not incorporated to make excessive amounts of money but to promote a healthier lifestyle in those communities who are at risk of heart disease and are less educated in this area. It also brings closer links with the community, health authority and leisure department."

"All verbal feedback about the scheme indicates that it serves a very important function in providing access to exercise for those who might not seek it on their own."

"We have had success in integrating many of our referrals into mainstream activities. We have run

specialist activity groups, as well as lifestyle behaviour changes groups and look-after-yourself, nutrition/healthy eating groups. We have brought many new people into our leisure centres."

"We are about to launch a cardiac rehabilitation suite which will provide more time/space for exclusive referral sessions."

The GP survey

Of the 61 replies received, 57 (33%) from 15 health authorities were involved in referring patients on EoP schemes. Sizes of practices varied. There were four small practices of 1200 patients or less, five very large practices of 10,000 patients or more, 17 practices of 1200–5000 patients, and 24 of 5000–10,000. The approximate percentages of ethnic minority patients registered with the practices were: 5% or less (28); 6–10% (5); 11–20% (9); 21–30% (3); over 31% (3); the remainder (9) did not know. The approximate numbers/percentages of South Asian Muslim women registered in the practices were: less than ten patients (5); less than 5% (36); more than 5% (7), with the highest being 50%. Three respondents replied none and eight did not know.

GP referrals

In all, 29 general practices kept a record of their referrals but 20 did not, while eight indicated that they did not know of any records. Thus it would not have been possible for 28 practices to specify the numbers of referrals if asked or to monitor their progress. Responses from five practices said that patients often asked to be referred to EoP schemes while another 30 stated that patients sometimes asked. This suggests that many patients are aware of schemes from one source or another. It raises the question of whether patients in the other 22 practices were aware of the schemes or whether GPs informed patients through posters or verbally.

When asked for the percentage of referrals who were South Asian Muslim women, 35 respondents did not answer and one did not know, while 14 stated that no South Asian Muslim women were referred. For those practices who referred patients, four respondents stated less than 5%, one 5% and one 30%. Clearly, the lack of recording referrals does not help the recall of this type of information. Only in three practices were any special provisions made for South Asian Muslim women – these included women GPs and translators. In 49 practices (85%) there were no special provisions; in

five the respondents said they did not know. It is most likely that in the latter five cases no special provision existed. As the majority of practices had some South Asian Muslim women registered, this level of special provision may be regarded as poor. It raises the question of whether GPs feel that special provision is required when less than 5% of South Asian Muslim women registered, as in the majority of cases. It also raises equal opportunities issues.

Twenty general practices were unaware of what happened when patients finished their EoP schemes and, in 37 practices, different outcomes were pointed to, for example, encouragement to continue with exercise and leisure passes for reduced rates to facilities. There appeared to be no fixed procedures, even between practices referring patients to the same scheme, and these seemed to depend on the time and interest of individuals. This raises questions about the role of GPs and communication between the agencies running the schemes.

Monitoring and evaluation

It was reported earlier that 29 practices kept a record of referrals; however, checks were made by only 16 to see whether patients took up the referrals to the schemes; 34 practices said specifically that they did not check and seven did not know. Methods of checking take-up were through future consultations, patient follow-up by practice nurses, and reports from leisure centres, fitness or administrative officers.

In the majority of practices that did something about patients not taking up the scheme when referred, counselling and encouragement to take up the scheme took place; however, 22 practices did nothing and 11 did not know whether any action was taken. In the latter group, this meant that nothing was done at the general practice end. The low number of general practices taking any follow-up action meant that it was left to the leisure or health officers to carry out this part of the service; this raises questions on the roles and functions of the different agencies and communication between them. In 14 general practices there had been an evaluation of the scheme; in 31 there had been no evaluation, and in 12 they did not know. Five respondents stated that there had been an evaluation report and 15 said there had not been a report; 34 did not know and nine said there would be a report in the future. In 45 practices the methods used in the evaluation were not known. These results showed that few GPs were aware of evaluations, which led to speculation about how

many GPs had actually read one and how many knew how effective the schemes were. The practices were asked if there were any other important features of the schemes and there were a variety of answers. Some of these were as follows.

“I feel being able to refer does encourage attendance but I’d like a better system to encourage non-attendees.”

“It is the patient’s responsibility to make contact with the provider. We get no feedback after completing the referral form.”

“Very successful, very enjoyable, easy access.”

“Friendly and not very costly.”

“Improved communication between all agencies and other health promotion projects.”

“The practice is currently building its own keep-fit annexe and the practice nurse is undergoing instruction as a fitness manager.”

“Contrary to our expectations, the scheme has been taken up by a lot of Asian women. We also have a ladies-only exercise programme at a local community centre where the women go.”

Issues and discussion

The main issues arising from the survey relate to:

- promoting the schemes generally, and specifically for South Asian Muslim women
- monitoring patients referred to EoP schemes
- roles and functions of, and communication between, officers and GPs; evaluation and effectiveness of schemes
- provision for South Asian Muslim women.

It seems surprising that there were some exercise referral schemes that did not have written descriptions or protocols. This meant that, in those areas, health and leisure officers and GPs, let alone patients, did not have access to a detailed written description of aims and procedures. Thus the scheme would always have to be described by word of mouth, and new officers and GPs might have to make specific enquiries. It also meant that there was possibly insufficient information for patients and little follow-up information to posters at points of contact, for example, surgeries. This could lead to inefficiency, lack of communication and clarity about procedures for staff and what is involved for patients. If there is no written document in English then it is certain that there will not be one in any ethnic minority language, which raises issues related to special provisions. There may well be time, staffing or financial

restrictions that have prevented or caused this situation but there appears to be a serious deficiency here in health promotion and communication as far as exercise referral goes.

Replies from both leisure centres and general practices suggested that monitoring procedures are weak or even non-existent in some parts of some schemes, for example, lack of records of registered and completed referrals by leisure centres, lack of knowledge by centres and GPs of take-up by patients, lack of ethnic minority and South Asian Muslim women monitoring. It is now generally accepted that monitoring is part of good practice of any new scheme and is the first stage in effectiveness and evaluation, and in equal opportunities policies. It is the means of tracking target groups, such as 'at-risk' patients and ethnic minority groups.

A number of replies to different questions raised issues relating to the role and functions of the different parties involved, communication between agencies, the amount of knowledge about the schemes some respondents had and good practice. This refers to: the lack of advice on activity programmes when first referred in a small number of cases, and also the lack of advice and assessment at the end of a course or programme in rather more cases; lack of feedback to GPs; lack of action about low take-up; not knowing what happens at the end of a course; no special provision for ethnic minority groups and, specifically, for South Asian Muslim women; lack of knowledge of evaluation and lack of evaluation itself. Some of these shortcomings could be overcome if procedures, roles and functions were laid down clearly: for example, it could be clearly laid down that advice and assessment is given at both the start and the end of a programme or at particular intervals, and feedback is given to the general practice. The right advice is clearly needed at the start but is also needed at the end of programmes, so that future activities are also under guidance, particularly for 'at-risk' patients.

Short-term programmes are likely to have little impact; advice can help to motivate and to reduce attrition rates. GPs clearly should examine their roles in this respect, particularly for EoP non-attendees. Communications networks also need examining in many schemes.

The lack of special provision for ethnic minority groups, and specifically for South Asian Muslim women, raises the issue of adequacy of equal opportunities policies in exercise referral. There are clearly shortcomings in many schemes at the referral level in general practice and at the provision level of suitable activities. Some schemes make good provision, such as translations, promotional literature in ethnic languages, dual language instructors, transport services and women-only sessions, but many schemes fail to provide some or any of these. South Asian Muslim women are known to be at risk, as indicated in the introduction to this report, and in order to facilitate their participation in schemes, special provision needs to be acknowledged and resources made available. This may well be a problem for small practices and leisure centres, and in under-resourced schemes whatever the size of the agencies. It appears that some schemes have still not built evaluation into their procedures. This is something that, again, needs resourcing but is essential if progress is to be made in showing the effectiveness of procedures and outcomes. This may be required in applying for grants. There was some evidence from the survey that some general practices were not aware of evaluations or the production of evaluation reports and that, hence, some GPs had not read existing reports. This raises questions of communications and, also, the commitment of the various parties, as well as GP's knowledge of the schemes. Executive summaries of evaluations could easily be produced that would not be too time-consuming to read, and meetings between the different parties could possibly be held to discuss the evaluations and the schemes.

Chapter 7

GP referral schemes: case studies

Case studies of the selected GP referral schemes are presented below, according to the following broad themes:

- descriptions of the EoP schemes
- background information on migration and settlement of South Asian communities in the selected areas
- availability of EoP data (see chapter 8)
- results from interviews (see chapter 8).

West Pennine Health Authority – ‘A Prescription for Exercise’

The West Pennine Health Authority covers the Oldham, Glossop and Tameside areas. This GP referral scheme was concentrated in Oldham until its expansion in April 1997, when it was extended to Glossop; a further extension commenced in Tameside in July 1997. The initial establishment of the scheme in Oldham was the result of a pilot study. The recommendations from this were used to launch a redesigned and larger-scale scheme on 22 February 1996 for the Oldham area. The review of the ‘A Prescription for Exercise’ scheme for this research project focussed on Oldham, as this area had the highest South Asian Muslim population under the jurisdiction of the West Pennine Health Authority, as well as being where the scheme had been running longest.

The rationale behind the scheme was the high incidence of CHD in the West Pennine area. Also, at the time of the pilot scheme, mortality rates for the area were also higher than for the rest of England. Four risk factors were identified for CHD – smoking, raised blood pressure, raised plasma cholesterol and inadequate physical exercise. The latter led to a pilot study being run in 1994 to look at the feasibility of GPs prescribing exercise at leisure centres in Oldham. It was run by the health promotion unit and involved six practices with 17 participating GPs.

Migration and settlement in Oldham

Migrants from South Asia to Oldham come predominantly from Pakistan and Bangladesh and, more recently, from India via East Africa.

Pakistani and Bangladeshi migrants were recruited in substantial numbers to meet labour demands in the manufacturing industries. Minorities within British towns and cities have always been characterised by their distinguishable residential segregation, which in the early days was constrained by the type and quality of housing available to them. Traditionally, the Glodwick area of Oldham was the first point of settlement for migrants to the area.

In 1991, nearly one-tenth of the ethnic groups living in Oldham were members of an ethnic minority group.⁸⁴ Like migration, the settlement trajectories of South Asian migrants in the UK vary. National settlement patterns for most of the South Asian migrants to the UK are reflected by the economically driven aspects of migration and, consequently, the largest settlements are found in the old industrial centres – the West Midlands, West Yorkshire, Lancashire, Central Clydeside and other selected areas of Scotland. In Oldham, the largest group of settlers are Pakistanis who, in 1991, made up 4.1% of Oldham’s population.⁸³ This is the twelfth largest Pakistani community in Britain. The Bangladeshi community is the second largest ethnic group settled in Oldham, 2.4% of the total population, and the fifth largest Bangladeshi community in the UK. Both the Pakistani and Bangladeshi communities are the fastest growing settler communities in Oldham. Oldham also has a sizeable Indian community of 0.7%.

These communities have very definite settlement patterns. On arrival in Oldham, Pakistanis, Bangladeshis and Indians settled in the Glodwick area initially. All these communities continue to be represented in the area but the largest community currently settled in Glodwick is that originating in Pakistan. The area forms part of the Alexandra and Saint Mary’s electoral wards. Although Pakistani immigrants are concentrated in this area, they have also settled in other areas of Oldham.

Some 31% of Bangladeshis are currently concentrated in and around Busk and Westwood – the highest single concentration of any single ethnic minority in any electoral ward. The area falls within the Coldhurst ward, which has the

second highest ethnic minority group in the borough at 37%, compared with 9% overall. It is important to note that although these communities are concentrated in particular areas of Oldham, they are also represented in other parts of the town.

The health of Oldham's South Asian Muslim population

The situation for many of Oldham's migrants is very different today from that when they first arrived to work in the textile mills. Economic restructuring in the 1970s and 1980s resulted in dramatic job losses in the industries that had employed migrant labour. The unskilled nature of this labour combined with discrimination led to high unemployment rates in settler communities. Those who are employed have low incomes relative to the white population, which has led to overall deprivation. This has implications for health and in *Health in Oldham*, published by West Pennine Health Authority,⁸⁴ social and economic deprivation are highlighted as being positively associated with poor health, so that most diseases and life-threatening conditions are more common further down the social hierarchy. The report⁸⁴ indicated that the Chief Executive's Policy Unit of Oldham Metropolitan Borough Councils had identified St Mary's, Alexandra, Werneth, Coldhurst, St James' and Lees electoral wards as those experiencing the highest levels of deprivation. As noted above, these are some of the areas of high Pakistani and Bangladeshi settlement, and it was from these ethnic groups that the South Asian Muslim women on the 'A Prescription for Exercise' scheme were drawn.

Organisation and promotion

'A Prescription for Exercise' is run as a partnership by the West Pennine Health Authority, local GPs and leisure centre managers. A participating GP identifies a patient who, it is considered, would benefit from the scheme (some patients may request a prescription). A prescription is written for 10 weeks of exercise on a three-leaf pad issued specifically for the programme. The GP retains the bottom two copies of the prescription and gives the top copy to the patient. The practice nurse carries out an assessment of the patient's health, after which the patient is required to take the prescription to the participating leisure centres. All local leisure centres are involved, although the Oldham Sports Centre and Chadderton swimming pool are not used. The top copy of the prescription is handed in at the leisure centre reception desk. The patient

receives a record card on which their progress can be recorded. The fitness consultant at the leisure centres carries out a fitness assessment on the patient and suggests a fitness programme. According to the EoP operational model, the fitness consultant provides on-going support and, at the end of the programme, the practice nurse repeats the fitness assessment and interviews the patient. It is generally believed that exercise will improve the patient's health and that a course of exercise will encourage continued interest in exercise.

However, there is a problem with GP practices that are on the boundaries of the Health Authority area. These practices have patients from both Oldham and Rochdale, and since they were unable to offer equal services to all their patients, they opted not to provide the service and so did not join the scheme. Oldham has embraced the scheme and this is seen in the EoP awareness filtering through at all levels and in all new initiatives. Glossop is newer to EoP but has started to see the benefits and now offers more services. Tameside has spent the last 18 months concentrating on going to Trust status and there has consequently been less emphasis on EoP. Thus, there have been different responses to EoP from the three areas.

All the leisure centres in the areas are involved in the EoP scheme but research suggested that use of facilities depended to a large extent on the staff running the premises. As one doctor commented:

"Some places have 50 new people coming into the scheme, some places have none. If you talk to Leisure Services, they will tell you that it is the staff. You can pick out where it is going to work because the staff are warm, relaxed, non-judgemental, easy-going and friendly."

The scheme is open to anyone aged 18 years or over with any condition but they must be medically fit without any recognised medical contraindication. In general, the scheme has been taken up by people over 50 years of age, most of them being over 65 years of age.

Funding

The EoP scheme is funded by the health authority and currently has a budget of £10,000. Although the programme is a partnership, the health authority was obliged to pay the local authority's Leisure Services for their involvement. This payment takes up a large proportion of the EoP budget. The project continues to attract funding. Patients are obliged to pay for using the leisure facilities if they normally pay for their

prescriptions. If patients do not normally pay for their prescriptions then the sessions are free of charge.

Bradford Health Authority – ‘Bradford Encouraging Exercising People’

The areas covered by the Bradford Health Authority are Silsden, Addingham, Ilkley, Burley-in-Wharfedale, Keighley, Bingley, Baildon, Cullingworth, Wilsden, Shipley, Queensbury, Wyke and Bradford. The Board of Directors (five executive and five non-executive) together with the Chair are responsible for the effective delivery of health and healthcare needs in the area.

Bradford from early migration to settlement in the 1990s

Pakistani migrants to Bradford are mainly from the district of Mirpur (Azad Kashmir, which is under the jurisdiction of Pakistan). Punjabis come mainly from Jhelum, Gujar Khan and Rawalpindi, from the Attock district of Chhachh. Pathans come from Bannu, Chhachh, Hazra, Kohat, Mardan and Peshawar, and Bangladeshis are mainly from Sylhet.⁵⁸

Bradford's South Asian Muslim population has very distinct settlement patterns. The Bangladeshis are clustered into three electoral wards: Undercliffe, Little Horton and Bowling. The Chhachhis/Pathans live in five of the inner city wards: Undercliffe, Little Horton, University, Toller and Bowling. The Mirpuries are dispersed throughout six wards, living in the same wards as the Chhachhis, except for Undercliffe, and also in Heaton and Bradford Moor.⁵⁸

Organisation and promotion

The Bradford EoP scheme, called BEEP, was launched in February 1995 as a pilot scheme in the Shipley area of Bradford. Initially, six general practice surgeries were involved but now over 130 GPs from over 30 practices are involved; ten sports centres, ten swimming pools, three health clubs, and many community centres provide a huge range of sports activities, including women-only gyms, swimming, bowling, walking and gym-based activities. The Recreation Division of Bradford Council supports the BEEP scheme by providing all leisure facilities, covering 30 sessions at concessionary rates. Along with the public sports centres, there are nine private health clubs who support BEEP by having reduced rates for exercise sessions.

Since starting, over 700 patients have participated in the BEEP scheme through referrals made from dieticians, physiotherapists and diabetic clinics at the Bradford Royal Infirmary and St Luke's Hospital. GPs, nurses and health professionals refer patients to the Community Health and Fitness Officer (the physical activity specialist), who assesses the physical activity needs of patients and then advises them on 'the most local, convenient, economical and beneficial sessions'.⁸⁵ The role of this officer is to 'provide detailed advice, motivation and support to participants, during and after the initial exercise programme'.⁸⁵

The criteria for referring patients to the BEEP scheme are that patients must be aged 18 years plus, be at risk from CHD/stroke or diabetes, or be at risk of mental or deteriorating health, that is, stress/anxiety/depression. The BEEP scheme is particularly aimed at disadvantaged groups, particularly those on low income, ethnic minority groups and those who are socially isolated.⁸⁵

Patients referred to the scheme receive 30 vouchers, which entitle them to obtain free or reduced-fee activities at local sports facilities for up to 12 weeks. They take the referral to the leisure centre and are given their induction by the health and fitness officer. Classes are held in the evenings and there are women-only sessions. Various activities are available, including swimming, swimming lessons, gym sessions, countryside walks, look-after-yourself classes, aerobics, circuit training, karate, judo, bowling, badminton, table tennis and tennis. Time Off On Fridays [TOFFS], for those over 60 years of age, is a special session held at the Richard Dunn Sports Centre. This session includes a range of activities, including badminton and swimming, to encourage older people to become healthier.

After completing the 12-week exercise programme, patients are given the incentive of continuing with their activities through reduced fees under Bradford's 'Passport to Leisure' programme. The EoP scheme is monitored by requesting feedback from patients, providers of services, and GPs and nurses, via questionnaires at 12 weeks, 6 and 12 months. Patients are asked for feedback on levels of satisfaction with the scheme and whether exercise has positively affected their health. The referring GP or nurse forwards the patient information to the Community Health and Fitness Officer, and all details are kept on a central database.⁸⁵

Leicestershire Health Authority – ‘Active for Life’

The ‘Active for Life’ GP referral scheme is run in five areas within Leicestershire. These are Leicester City, North West Leicestershire, Charnwood, Bably and Market Harborough. Initially, a pilot scheme was run from September 1995 to April 1996. Results indicated success and the evaluation highlighted the potential benefits of a larger-scale project. The scheme was subsequently run in Leicester City and North-West Leicestershire. It was expanded to include Charnwood in September 1996, Bably in September 1997, and Market Harborough in 1998. This research focused on Leicester City, as this is the area of highest ethnic community settlement.

The long-term aim of the scheme was to improve the health of target populations through the encouragement of healthier and more active lifestyles. The short-term aims were:

- to link GPs’ surgeries with local leisure providers to introduce inactive individuals to physical activity
- to develop a scheme acceptable to all agencies and individuals involved
- to introduce inactive individuals to physical activity in order that they may benefit from associated health gains
- to increase participation in physical activity at local leisure facilities.

Targeting ethnic minorities in Leicester

Leicester has a total population of 272,133. According to the 1991 Census, its ethnic minority composition as a whole was 76,991 or 28% of the total. Only 2644 or 1% of the total population are of Pakistani origin. In 1991, Bangladeshis made up 1053 or 0.4% of the total population. This is significantly lower than the populations in other case study areas.⁸⁶ This does not, however, mean that there is a limited Muslim presence. Islam is a majority religion in the area. Approximately half of the 60,297 Indians are Muslims, as well as the Pakistanis and Bangladeshis.

Migration and settlement in Leicester

Pakistanis began to arrive in Leicester in the 1960s. In 1970 the Community Relations Officer estimated that there were 2000 Pakistanis and Bangladeshis.⁸⁷ As with many of Britain’s industrial cities, migrants were attracted to Leicester because of the range of industries available; it is known as ‘a city of a thousand trades’. Other factors included the

fact that Leicester is easily accessible via the M1 motorway. This was no doubt an important factor for migrant populations who wished to maintain personal, social and religious relationships with migrants in other parts of Britain.

Another attraction to settlement after migration was the availability of cheap housing. The Highfields and Belgrave area of the city was the first ports of call for many migrants. As well as providing a range of cheap housing (although of poor quality), the area was easily accessible via the London Road and the old Midland railway on one side and by Spinney Hill Park on the other. It was also near the foundries and the mills. Other settlements occurred along the Belgrave and Melton Roads (predominantly East African Asian) and along Narborough Road.

According to the 1991 Census, the three highest percentages for Asian settlement in Leicester are Spinney Hill (70.7%), Crown Hills (69.4%), and Latimer (67.1%). The Spinney Hill area also has an above average rate of unemployment at 10.2%.

Organisation and promotion

The referral process varies slightly in each of the five areas covered by the scheme. Patients may be referred by GPs and practice nurses, or may contact the scheme coordinator or the local referrals coordinator. All patients referred to the scheme by GPs are invited to attend an exercise consultation with the referrals coordinator. Consultations may take place at one of three Leicester City Council leisure sites – the Beaumont Leys, New Parks or Spence Street Leisure Centres. Consultations often take place in group sessions lasting approximately 30 minutes. Patients are introduced to the scheme and offered the opportunity to make arrangements to discuss suitable activities. Patients are provided with their own activity booklet that contains tips on activity at home and a diary section to monitor their own progress. They are also shown around the centre. Until recently, patients on the ‘Active for Life’ referral scheme attended specific sessions set aside for referral patients. This system of arranged sessions limited patient flexibility and the system was changed so that patients could access facilities at any time during the day when a trained member of staff was available. The prescription can last up to 6 months and each activity session costs £1.20.

The ‘Active for Life’ referral scheme is run at four sites – the Saffron Lane Sports Centre, the Spence

Street Sports Centre, St Margaret's Pastures and Leicester Lees. For the purposes of this research, interviews were carried out at the Saffron Lane and Spence Street Sports Centres, as they were used by many of the South Asian Muslim women on the scheme.

Funding

Leicestershire Health Authority funds the 'Active for Life' referral scheme through their Special Project Monies fund; this includes covering the cost of the coordinator who is based at Loughborough University.

Birmingham Health Authority – 'Exercise on Prescription'

The rationale behind Birmingham's 'Exercise on Prescription' was to get people who did not normally exercise to participate in some sort of physical activity. The main aim was to increase long-term involvement in physical activity by prescribing participation in a guided programme of activity, with a view to reducing the incidence of a range of medical conditions including CHD, hypertension, osteoporosis, stress and obesity. This was in line with the Government report, *The Health of the Nation*, which presented evidence that suggested that Britain was a rather sedentary nation with a significant rise in people falling into the obese category.⁸ For example, the notes from the Birmingham pilot scheme highlighted that "49% of women are overweight or obese",⁸ and "only 30% of women over 55 years have sufficient leg power to climb stairs easily".¹¹ According to the HEA, "71% of men aged between 55 and 74 years are not physically active enough to benefit their health".¹⁷

The Birmingham EoP scheme was set up after a pilot scheme that commenced on 4 October 1994. At this stage, the scheme involved 37 GPs from 12 practices. An initial investment of £150,000 for 3 years was obtained from the primary care reserve investment fund in Birmingham. The 1997 pilot study identified that, on 2 November 1997, there were approximately 1730 patients registered on the project – an average of 80 patients per general practice. Benefits identified by patients were an overall reduction in smoking, better sleep, growth in confidence, a complete change in eating habits, a reduction in medication, lower blood pressure and new groups of friends. As a result of the success of the Birmingham pilot scheme, a full scheme was offered by 1998.

Migration and settlement in Birmingham

Migrants from South Asia to Birmingham came predominantly from Pakistan (6.9%) and India (5.3%). A smaller proportion came from Bangladesh (1.3%). The migration from Pakistan and Bangladesh occurred for the reasons presented earlier. In brief, migrants followed pioneer migrants. In the 1950s, they were encouraged to move as Britain recruited manpower from its former colonies. Thus, many of those who moved were economic migrants whose migration can largely be explained in terms of economic 'push and pull' factors and 'chain migration'. More specifically, Pakistani migrants to Birmingham came largely from the Mirpur district of Azad Kashmir; they also came from other areas such as Campbellpur, Nowshera, Rawalpindi, Jhelum, Gujarat and Faisalabad.

The 1991 Census recorded 66,116 people of Pakistani origin in Birmingham, the largest ethnic community in that city. However, a recent study indicated that the census undercounted the Pakistani population in Birmingham by at least 5%, which means that Birmingham's Pakistani population is at least 70,000 strong, with approximately 50% being under the age of 16 years.⁸⁸ When Pakistanis came to Birmingham, one of the first areas in which they settled was Balsall Heath – an area of cheap housing and factories. The 1991 Census indicated that Pakistanis are now concentrated in five electoral wards in the inner city – Sparkbrook, Sparkhill, Small Heath, Washwood Heath and Nechells.

According to the 1991 Census, the Bangladeshi population of Birmingham was 12,739; this represents over 70% of the Bangladeshis living in the West Midlands and 1.3% of Birmingham's overall population. Although some Bangladeshis have been settled in the Midlands since the 1930s, the majority of male migrants came to Britain in the 1960s for economic reasons. Family reunification occurred in the 1970s and 1980s. This was much later than Pakistani migration and settlement. Thus, the Bangladeshi community members are relative newcomers to the UK compared with their Pakistani counterparts. Many of the Bangladeshis living in Birmingham came from northeast Bangladesh, the area known as Sylhet; other districts from which migration occurred included Noakhali and Chittagong. The reasons for migration are similar to those presented in the Oldham and Bradford case studies. It is perhaps worth noting again that most migration from Bangladesh started in the 1960s through the

'voucher scheme'. There were three types of vouchers available as the UK recruited people from its former colonies to fill the labour shortages after World War II: 'A' – for specific jobs; 'B' – for jobs requiring specific skills or qualifications; 'C' – for unskilled jobs. Most migrants from Sylhet came on the 'C' class voucher. Bangladeshi migration to Britain increased in the 1950s and 1960s. There have been alternative explanations of the economic migration scenario presented here; these have included Calcutta Port becoming inaccessible to the Sylhetis after partition in 1947, and links to the Queen's visit in 1962.⁸⁹

The unskilled jobs available were invariably poorly paid. Many unskilled migrants worked in local manufacturing industries, such as Lucas, BSM and Delta Metals. Low wages meant that the Bangladeshi migrants were forced into low cost, poor quality inner-city housing. Like the Pakistanis, the migrants first settled in the Balsall Heath/Highgate area of Birmingham. Currently, the largest Bangladeshi settlement is in the electoral ward of Aston; there are also significant settlements in Handsworth, Sparkbrook, Sparkhill, Small Heath, Washwood Heath, Soho and Nechells.

The health of Birmingham's South Asian Muslim population

Birmingham is the regional capital of the West Midlands, located in the heart of the UK. Birmingham has the largest ethnic minority population of any British city. From a total population of approximately 1 million, nearly 21% of the city's population are of non-white origin, compared with the national average of 5%. In some areas of Birmingham, more than 50% of the population are from ethnic communities. Aware of the large settlements of non-white communities, Birmingham Health Authority introduced an action plan for black and minority ethnic health in November 1996. This was updated in 1999/2000. The main aims were to identify and understand community needs and to improve service provision and access through various initiatives.⁹⁰ The plan also indicated that people from South Asia were, on average, more likely to have higher death rates and die younger from heart disease, and commented that some of the ill health and premature deaths from these diseases could be avoided through lifestyle changes.⁹⁰

There are a series of health problems common to many South Asians in the UK. The Pakistani and Bangladeshi community profiles published

by Birmingham City Council^{88,89} highlighted the following.

- Asians have 40% higher risk of having heart disease than the UK national average.
- Asians under 40 years of age are three times more prone to heart disease than the national average.
- Diabetes is five times more common among South Asians than Europeans.
- Asians are 25 times more likely to suffer from tuberculosis.

In addition, the high incidence of beta thalassaemia among Bangladeshis who migrated from coastal areas was noted in the Bangladeshi community profile. It is generally accepted that a combination of lifestyle and poor access to health services are contributory factors to this condition.

Many of the Pakistanis and Bangladeshis who were included in the sample for this research live in some of the most deprived areas of Birmingham, which are also areas of high unemployment. The 1991 Census showed that the highest rates of unemployment were among Pakistanis and Bangladeshis. Over 35% of economically active Pakistani men and about 45% of Pakistani women were unemployed in April 1991. For Bangladeshis, the unemployment rate was 41.5% for men and 44% for women. The average unemployment rate for the city of Birmingham as a whole was 14.3%.

Organisation and promotion

The GP referral process for the Birmingham EoP project broadly consisted of five stages. Initially the patient would visit a GP or practice nurse. Occasionally patients had heard about the scheme and requested that they be put on it, but usually the GP or practice nurse suggested that they would benefit from the scheme and asked them to fill in their prescription card. An appointment would then be made for the patient to meet a health and fitness adviser. The second stage of the referral process was to meet the health and fitness adviser, when the patient was introduced to the opportunities available at the leisure centre. Advisors and patients worked together to develop a personal physical activity programme. This programme could consist of individual and/or group activities and a fitness appraisal. The advisors ensured that patients had all the information they needed related to starting an exercise programme: for instance, the exercise facilities available to them, how to operate exercise equipment, appropriate clothing and footwear.

Once this information had been given to the patient, another appointment was made for the exercise programme to commence. At the third stage, the patient received 10 × £1-off admission vouchers for use at the leisure facilities. One of the unique features of the Birmingham scheme, which appeared to be a key factor in patients' overall comfort and in their continuation of the programmes, was that each centre had a health and fitness officer dedicated specifically to EoP patients. The health and fitness officers were easily identifiable as they were the first port of call for patients. They wore special shirts and, at the Sparkhill Pool and Sports Centre, had a consulting room.

These factors appear to be important in building a special relationship with patients. This sort of personal approach was less visible in the Bradford, Oldham and Leicester EoP schemes. Although the Leicester scheme had a referrals co-coordinator who had contact with patients, this was limited to instruction during induction on to the schemes and any continued support appeared to be based on patient initiative. When special bonds were created they tended to be based on the initiative and personalities of the individual instructors: for example, Muslim women at the Oldham Sports Centre had a strong affinity for the female Muslim instructor during the Sunday women-only swimming and aerobics sessions. Although this was no doubt related to commonalities based on gender, language and religion, it was also directly related to her friendly and sympathetic approach. South Asian Muslim women who attended the Oldham Sports Centre at other times during the week did not have the same affinity for their instructors; consequently, most used the facilities on Sundays.

The Birmingham EoP scheme appeared to be more in tune with the special requirements of the community it served. Many of the scheme's Muslim patients attended the Sparkhill Pool and Sports Centre. The EoP adviser, although not a Muslim, was of South Asian origin and, importantly, spoke the language and was familiar with South Asian Muslim nuances of etiquette. These factors may be important in access and use of facilities, as he pointed out, particularly since many EoP patients 'might not be 100% committed'. Any special provisions will therefore increase participation for the full prescription period.

The prescription continued for up to 10–12 weeks. Within this time patients were permitted to do as much exercise as they wanted but were generally

advised to attend the leisure centres two or three times per week. At this point, the health and fitness adviser met the patient again to discuss the programme. The adviser then referred patients back to their GPs and practice nurses so that a review of the patient's health after exercise could be undertaken. The final stage of the referral procedure was at the discretion of the GP and/or the practice nurse, who might consider that the patients would benefit from another prescription or, alternatively, that they were able to continue with exercise independently.

The Birmingham EoP scheme is promoted through brochures at GP surgeries and at Birmingham's leisure centres. Leisure Point (a grouping of different sports centres run as a business) runs over 40 leisure sites in and around Birmingham but only four leisure centres run the EoP scheme – Cocks Moors Leisure Centre, Kingstanding Leisure Centre, Aston-Newtown, Sparkhill Sports Centre. The review of the EoP scheme for this research focussed on the Sparkhill Sports Centre, as the Sparkhill area of Birmingham had a high South Asian Muslim settlement.

Funding

The Birmingham EoP scheme is run by Leisure Point in conjunction with Birmingham City Council. Funding for the pilot scheme was provided by Birmingham Health Authority. General practices that joined the original pilot scheme did not have to pay to join the scheme as, at that point, they were funded by the Health Authority. Those that joined the scheme after 1988 were asked to buy into the scheme at a cost of £1000 for referring 30 patients. At the end of the pilot scheme, the Department of Leisure and Community Services were offered joint finance – 50% health authority and 50% city council. Now primary care groups are employing their own health and fitness adviser.

Blackburn with Darwen – 'Fitness for Life'

The 'Fitness for Life' scheme started as a pilot scheme in 1994 when 13 GPs in Darwen Borough started referring patients to the Darwen Leisure Centre. The initiative came from partnership between East Lancashire Health Authority and, as it was then, Blackburn Borough Council. The aim of the scheme was to increase physical activity and encourage a healthy attitude to the benefits of physical activity. Patients were offered a one-to-one consultation and health screening, a tailor-made

fitness ‘prescription’, concessions on leisure facilities over 10 weeks, and a review appointment to evaluate adherence to the scheme. The success of this pilot scheme resulted in further funding being secured from Blackburn Borough Council, East Lancashire Health Authority and The Single Regeneration Budget. Consequently the scheme was expanded in January 1997 and became borough wide. This expansion also resulted in the development of a team of health professionals who contributed to the wide variety of instructor-led and supervised gym sessions taking place in community centres and leisure centres.

The ‘Fitness for Life’ scheme was designed for people who may have become inactive, have specific medical problems and who would benefit from a specifically developed programme of exercise. In order to be referred to the scheme, patients must be at risk of CHD or diabetes, be overweight, suffer from back pain or a general inability to exercise, such as in the elderly, or suffer mental health problems, such as anxiety attacks, stress and depression.

Migration and settlement in Blackburn

Migrants from South Asia to Blackburn came predominantly from India, Pakistan and Bangladesh and were recruited for the local textile industry. The 1991 Census indicated that 5.88% of the total population was Pakistani and 0.23% was Bangladeshi. The main areas of Pakistani and Bangladeshi settlement were in the electoral wards of Shear Brow, Bastwell and Audley.

The health of Blackburn’s South Asian Muslim population

The 1998/1999 ‘Fitness for Life’ annual report acknowledged that the needs of ethnic minorities were different from the needs of the white indigenous population. A combination of language and communication problems between patients and healthcare professionals, and a lack of cultural sensitivity by the latter, may account for this. With particular reference to the EoP scheme, the report pointed out that “the low adherence rate (to the EoP programme) highlights a need to address the issues surrounding barriers to participation for this particular community group”.⁹¹

Organisation and promotion

The organisation and promotion of the ‘Fitness for Life’ referral scheme followed patterns similar to

those described earlier. The GP or practice nurses made the referrals. As in Oldham, a three-leaf pad was used (the white copy is given to the patient, the yellow copy is sent in a pre-addressed envelope to monitor the scheme and the blue copy is for the patient’s notes). Once a patient was referred, they made an appointment with a ‘Fitness for Life’ adviser. The patient was then given a card on which to record their progress. This card also allowed them reduced rates at the participating leisure centres for a period of 10 weeks. The cost of exercising with the card was £1.40 for an activity with an instructor or otherwise £1.10. If a patient was eligible for a ‘passport to leisure’, they paid £1.40 for instructor-led lessons or otherwise £0.50 (£0.60 at the Regency Suite). After completing the 10-week programme, the patient’s health was reviewed by the ‘Fitness for Life’ adviser. The patients were also asked to review the programme by completing a questionnaire. Another prescription could be issued at the discretion of the GP or practice nurse.⁹¹

There were three participating leisure centres: Darwen Leisure Centre, Audley Sports and Community Centre, and the Regency Suite at King George’s Hall. The Audley Sports Centre was very easily accessible to Blackburn’s South Asian population.

In the 1998/99 annual report,⁹¹ a small increase in the number of patients referred on to the scheme was highlighted, from 1109 patients in 1997/98 to 1166 in 1998/99. Although this was only a small change, numbers have increased significantly since the scheme started in 1996/97, when there were only 390 referrals. More women were referred to the scheme than men. Of those referred in 1998/99, 11% were from ethnic minority groups, with an adherence rate of 35%. When compared with the demographic ethnic make-up of the area, this figure is rather low. It was noted in the report that ethnic minority females were more likely than ethnic minority males not to complete the 10-week exercise programme.⁹¹ Poor adherence rates have led to an investigation of the issues surrounding low rates of ethnic minority uptake, through the development of a multi-agency approach to encourage ethnic minority groups to increase their physical activity. The activities available ranged from aerobics and other gym-based activities to swimming. Special provisions were made for women-only sessions, particularly swimming.

Chapter 8

Results from the GP referral scheme: case studies

The results of the data collection relating to the special requirements for South Asian Muslim women are presented as follows:

- availability of EoP data on the schemes in the five case study areas
- results from in-depth interviews and focus groups with South Asian Muslim women on the EoP schemes, exploring their perceptions of the schemes and factors affecting acceptability and uptake
- comments from key workers in community centres
- comments from EoP providers, including key individuals responsible for the organisation of the schemes
- comments from key individuals at leisure centres
- comments from participating GPs.

EoP data

For most of the schemes there were no formal EoP data available and there were no structures in place for an analysis of EoP data. Any information that was available was *ad hoc* and depended very much on the individual initiatives of the project managers. The scheme coordinators for the BEEP project had no formal structures available to identify their EoP patients. The West Pennine Health Authority held useful patient information in the form of the prescription slips returned to them by participating general practices and leisure centres. From these it was possible to identify those people who were referred to the scheme, and those who took up exercise at the leisure centre, and to estimate a drop-out rate. Furthermore, it was possible to identify South Asian Muslim women on the scheme under the above criteria, as they were identified by name. Muslim names are of Quranic origin and easily identifiable.⁹² In this case, the practice nurses were asked to keep a record of all those patients referred to the scheme but the practice is not systematic. The leisure centres kept a record of all individuals taking exercise in their premises but there were no specific records of EoP patients.

Information was available from the Leicester 'Active for Life' scheme in the form of an evaluation report.⁹³ Although data were made available in this report on the number of referrals, percentage attending induction, percentage completing 3 months, age profile of patients referred, and reasons for referral, there was no information on the numbers of patients from ethnic communities attending. Thus, although Leicestershire's 'Active for Life' referral scheme had a better-organised monitoring procedure than the other schemes highlighted in the previous chapter, it still fell short of specifically identifying patients from ethnic communities. More specifically, the scheme had referral forms that were eventually returned to the GPs who might carry out patient health checks, together with a method of monitoring a patient's health status before and after the scheme. The referrals coordinator was also unable to highlight the GPs who referred South Asian Muslim women to the scheme. One of the reasons consistently mentioned by EoP providers for the low levels of monitoring and evaluation was limited financial resources. Most commented that this made evaluations an unrealistic objective in the short term. Nevertheless, there appeared to be a willingness to improve on this in the future.

South Asian Muslim women's voices

During this study, many positive aspects of exercise were expressed, especially the overall positive effect of exercise on South Asian Muslim women, particularly on their health and well-being. The social aspects of exercising were also often mentioned. Overall, South Asian Muslim women mentioned increased energy levels and more motivation in all aspects of their life. There were, however, many barriers to participation. The key factors affecting South Asian Muslim women's acceptance and uptake of EoP schemes can be split into two main types: structural factors and attitudinal factors. These applied at all levels of EoP structure. Data are presented below according to these factors for South Asian Muslim women on EoP schemes.

Structural barriers

Access to facilities

Access to facilities was one of the most often quoted structural barriers to exercise. With the exception of the Sparkhill Pool and Sports Centre in Birmingham and the Audley Sports Centre in Blackburn, which were located in the heart of these South Asian Muslim communities, the remaining sports facilities were located some distance away. This constituted a significant problem and was a barrier to participation among South Asian Muslim women respondents.

As one respondent said:

“I know it isn’t really that far but it is, if you know what I mean, because it gets dark now and, when you hear about all these things that are happening to women, I don’t even want to go across the road these days. It’s not worth it.”

Access became more of a problem if transport had to be used, as this was seen as adding to the overall cost of exercising.

The cost of exercise

Many South Asian Muslim women on all the EoP schemes felt that even with a prescription, exercise was expensive. Although many schemes did not charge for the initial prescription programme, the women had to pay for follow-up programmes. These women were, of course, those who had to make some contribution towards their prescriptions. Many South Asian Muslim women live on low incomes or are on income support, and even a minimum payment for exercise was seen as a waste of limited resources. As Mrs F on the Blackburn ‘Fitness for Life’ scheme indicated:

“I know that they don’t ask us to pay for much but even that is too much for me. I have really young children and I have to look after them. Now that they are getting older, their needs are becoming more and more, so paying for exercise just doesn’t feel good. Sometimes I think I might as well run around in the garden; at least it would be a lot cheaper. I think that people like me should be let off paying, because I really need it for better health.”

Another respondent, Ms S, pointed out:

“...they are compromising their children’s needs.”

Childcare facilities

An additional issue for South Asian Muslim respondents were the problems caused by lack of crèche facilities. This was a recurring theme for women on the EoP scheme in Birmingham. Mrs D from Birmingham said:

“I know what’s available and I want to get fitter but who will look after the children? I will probably have to wait until they start school.”

Referring to the Sparkhill Pool and Sports Centre, where there were special provisions for women such as women-only sessions on Wednesday and Thursday mornings, Mrs F said:

“My friends go there and it’s easy in a way because it’s just over there; however, my children are not at school yet, so what can I do? I suppose my health will suffer for a while.”

and

“I could come both days if I could get someone to help with my children.”

Although childcare facilities were available at the Leicester and the Audley Sports Centres, these were not available for all the women-only sessions. While conducting interviews at the Thursday evening gym session at the Audley Sports Centre, it was noted that many South Asian Muslim women had brought young children along with them. Young non-exercising female members of the family were looking after them outside the gym area.

Even where childcare facilities were available, some women pointed to this as adding to the cost of exercising. As Ms D, the mother of two very young children, pointed out:

“I have always loved doing this sort of thing but now that I am a mother I have to think of them. Facilities for children are OK but that just means more money that I haven’t got. Unless I can find someone to look after them, I have a problem getting here.”

Women-only sessions

All South Asian Muslim respondents highlighted the problem of the limited number of women-only sessions. This was expressed most fervently in the case of access to the Oldham Sports Centre. This facility held one women-only session on Sunday afternoons. Mrs D commented:

“I only come on a Sunday because I know that it’s women only. The rest of the week I don’t bother because I am not really comfortable with men around the place. I don’t really use my prescription properly, you know.”

Although there were a variety of activities on offer, they were all offered on one occasion only, Sunday afternoon/evening. There were other facilities open to EoP patients in Oldham but the women commented that these were not accessible; to get to them would require transport, which would add to the overall cost of exercise. As with

women in Oldham, many women elsewhere also expressed their wish to exercise in an all-women environment and to have more sessions available to them. One respondent on Leicester's 'Active for Life' scheme said:

"Now that I have got used to exercising, I wish there was more that I could do. Just coming for on one day isn't enough really. It kills me but I know that it isn't really enough. One week you might be ill, or a friend or relative comes around, and you can't come; so then you miss everything for one week. I think there should definitely be more sessions for just women alone."

In Blackburn, women on the 'Fitness for Life' scheme appeared to be unaware of all the sessions available to them. As one respondent highlighted:

"If there were more sessions I would definitely try and come. I can't swim so I just come on Mondays and do everything."

The interesting point here is that there were many women-only sessions available to EoP patients at the Audley Sports Centre in Blackburn. From the above comment, it appears that information on available facilities may not be filtering down to the EoP patients.

Language

Those women who were able to access facilities thought that language was a barrier to communicating their needs and understanding the range of services available to them at the facilities. One woman from Oldham said:

"I turned back at the door because I knew I wouldn't be able to understand what the lady at the desk would say."

"I think it is really bad for women like me who can't speak English. I can understand it most of the time but I can't reply or read or write it. Sometimes I think that white people don't understand our needs. They just think we don't want to be healthy and exercise – but we do. I think that the younger girls and women are better off and know how to stand up for themselves because they understand English. I'm glad my daughter understands my situation. She always stands up for my sister and me."

There was an attempt to deal with problems of communication by the women themselves, as one woman pointed out:

"Sometimes the receptionist helps but sometimes I take my daughter along with me. She can speak and understand English really well. She goes to university."

As mentioned previously, language problems may be one of the problems in informing South Asian

Muslim women patients of the facilities available to them. Mrs F discussed how she found the language barrier problematic at the outset and how she has tried to overcome this problem.

"I came here really excited but I was also worried that there would be no other Muslim women here, although I do know of women in our community who do this. Anyway, when I came I just thought there would be someone I could speak to here. I can speak a little English but I don't always understand it. So I just watched what everyone else was doing and did it like that. They did explain but I didn't really understand. I just moved my legs the way everyone else did. Then I asked this youngish Asian girl and she explained things."

Another woman on the 'Fitness for Life' scheme explained:

"I don't have any communication problems because my niece comes with me."

On the Thursday session at the Audley Sports Centre, there were many non-exercising young South Asian Muslim women standing about outside the gym facility. These women were relatives or friends of the exercising South Asian Muslim women who were acting as translators or child-minders.

Attitudinal barriers

Culture

Culture has often been referenced as being a barrier to exercise. In popular writing and the media, the culture of Muslim settlers is seen as restrictive while Western culture is liberating. In many cases, culture has been conflated with religion so that the distinction between where culture ends and religion begins is blurred. As one woman from Blackburn pointed out:

"Our Muslim culture doesn't stop us exercising. We have always exercised. We perform *Namaz* five times a day and that's the best exercise; and everyone knows that you have to walk to places to stay well."

When women articulated concern by their husbands and community, this was related to their general safety. One woman from Oldham commented that:

"My husband drops me off and picks me up. I feel safer and he is happier."

Another woman said:

"Our men and us, we just don't want a mixed environment."

Mrs F said:

“Our communities know we need to be healthy. However, exercise is so different here – back home we were fit but here we just don’t know how to look after ourselves.”

This lady from Blackburn was adamant that the idea of men preventing women from exercise was, as she called it, ridiculous:

“This is nonsense. If a man sees that his wife is getting some good from getting out and about, he won’t prevent her from doing it. It is more to do with the idea that women might be doing exercise with men in the same room – that’s not allowed.”

The importance of exercising in an all-female environment was referred to by Ms H, with reference to the aqua-aerobics sessions held at the Leicester Sports Centre. Her point was that although it was a women-only session, there were always men present – so the session was not really women-only.

“There are always men about. If they are not there when you start, they are coming in afterwards. I have arthritis and I have been coming for a year. It doesn’t bother me as much as some other women, who won’t go swimming because of this.”

“As you can see, there is more than one swimming pool and when we are in one of them, in the ladies-only session, the other ones are being used by men; everyone can see everyone else.”

Religion

Islam was not seen as restricting exercise; indeed, as discussed above, many women pointed out that the concept of exercise and well-being through physical activity is inherent to Islam, as exemplified through the ritual aspects of the religion, that is, *Namaz* which involves kneeling and prostrating. As discussed above, South Asian Muslim respondents emphasised the importance religion places on the separation of the genders in certain environments. The lack of awareness of male–female dynamics within Islam and the basic requirement of segregated space was often referenced as a barrier to exercise.

“I prefer to exercise in a women-only environment. It’s simply because I feel more comfortable and you don’t really have to worry about what you wear. But if there were mixed classes, with the exception of swimming, I think I would still go. If I didn’t feel comfortable I would stop.”

“I don’t think that religion prohibits Muslim women from exercising. Health is about well-being and we should all be interested in our health. The only religious factor for me would be that I wouldn’t do certain exercises in a mixed class, especially

swimming. It wouldn’t be right to be going about in a swimming costume with men around. I know some young Muslim women who do and I don’t understand how they can. I don’t think there’s any need and it makes me wonder why they do it.”

“I don’t think there is anything in Islam that says that women can’t exercise; but what we must do is dress properly, not showing parts of the body – that is not acceptable. It doesn’t affect me since I wear *shalwar-kameez* anyway. I think that younger people exercise in whatever condition they want. I don’t agree with this. I think that girls and boys must exercise separately, and girls should wear appropriate clothes. I am a Muslim and would never dream of going out without my head covered, let alone exercise wearing hardly anything.”

“Some women think that you have to wear trainers and tights when you exercise but I know women who wear *shalwar-kameez* and *dupattas* when they exercise. I think that puts off a lot of women. I think that some husbands believe that women dress disrespectfully when they exercise, so they [the husbands] have to be told that it is not like that.”

Racism and religious discrimination

Some South Asian Muslim respondents highlighted the way that they saw themselves being perceived by others as a potential barrier to exercise. Direct and indirect racism and religious discrimination appeared to dominate these conversations. The attitude of the majority white community was often referred to – for example:

“I think that some white people don’t understand Pakistani people. They think we are all stupid and uneducated but we are not. That really puts people off from going out to places. But there are a lot of white people like my doctor who are all right.”

“If anyone did say or do something that was derogatory, I wouldn’t put up with it. I ... know how not to tolerate racial abuse from anyone. If someone said to me I shouldn’t wear leggings in a class then I would complain and make an issue of it, because as long as we dress with safety in our minds, I don’t think it should be an issue. I think if a Muslim woman wants to wear the headscarf during aerobics or something, then she should be allowed to. There definitely needs to be tolerance.”

“I come along but I wouldn’t if there weren’t so many of our women because I always feel that I am treated differently if I am on my own – sort of looked at. I always feel that they think ‘Who are these people that want to cover up?’.”

Community workers’ comments

Each case study area varied in terms of the relationship with community workers and

community centres. 'A Prescription for Exercise' in Oldham was not running at any of the community centres, although some facilities were available and community centres were willing to participate in the scheme. However, there were better relationships with community workers, who acted as a link between the health authority, leisure centres and the local Pakistani and Bangladeshi communities. Their main role was to inform and organise exercise in the sports centres, as well as in the local community. In Birmingham, although Leisure Point and Birmingham City Council worked closely together, there appeared to be very few links between the leisure centres and local community centres. This was particularly unfortunate as, in the case of the Sparkhill Pool and Sports Centre, they are located on the same street separated only by the local library, which is equally underused.

Community centres may be used on an *ad hoc* basis, sometimes because of the facilities available:

"This tends to be because some of the leisure centres have not got rooms big enough to hold a keep-fit class or a meeting in. With Sparkhill and Aston-Newtown, the centres aren't so big, so community centres may be used a little more but not greatly. In Sparkhill, the leisure centre used the school – it used one of the rooms for an exercise class. This wasn't especially for EoP but patients did use it. All this is on a very infrequent basis."

The Leicester 'Active for Life' scheme was unique of all the case studies in this research, as it was more inclined towards using community centre facilities. Unfortunately this partnership was confined to one Community Centre, the Bhagini Centre. This is a women-only community centre providing a range of services for women in the area. Approximately 95% of the women who use the centre are Asian and 20% of them are South Asian Muslim women. One of the things they focus on is better health for Asian women. In line with this, they offer a number of 'Get Active Sessions' that involve aerobics, step aerobics, body conditioning, yoga and 'bums, tums and thighs' sessions.

The Bhagini Centre's response to the 'Active for Life' referral scheme was to get involved and offer the above services to women being referred by GPs on to the scheme. After showing interest, the Bhagini Centre trained two members of staff through Loughborough University to act as health advisers to potential referral patients. The scheme was advertised in surgeries, schools, libraries and other community organisations around Leicester as offering opportunities to participate in physical

activity under the guidance of trained advisers. Despite the Centre's efforts, however, there was only a very low uptake rate. Only two or three women were ever referred to the centre and from only one GP surgery. Conversations with members of staff at the Bhagini Centre highlighted some of the structural and attitudinal barriers for South Asian Muslim women. Concern was expressed over what was described as the general lack of concern about Asian women's health among Leicestershire healthcare officials and, particularly, GPs.

Structural barriers to exercise

Access to facilities

Problems of travelling to facilities were seen as constituting a barrier to South Asian Muslim women participating in the EoP schemes. As one community worker in Leicester commented:

"It's all very well having these things up and running, but how do women who don't drive get to a gym? There are no special services for them and they may be uncomfortable taking the bus. Apart from the cost going up, they don't feel safe on dark nights on buses ... and that's only if the gym is on a bus route in the first place."

It was suggested that this problem could be alleviated by a more inclusive approach towards community centres. One Bangladeshi community worker from Oldham made this point very succinctly:

"Here we are in the heart of the community. It's literally just across the road from us and they all know we are here. There are no big roads or anything to cross, let alone the distance from their homes. These are Bangladeshi women and they are very traditional – they won't go anywhere far. They come to sewing classes here and they used to exercise when we did it. They would come again."

Availability of female instructors

One of the common structural barriers mentioned in all the schemes was the availability of South Asian female instructors. In Oldham, women from the local community were encouraged to complete an instructor's course at Oldham College. Women did attend the course, specifically, one Afro-Indian woman, one Bangladeshi woman and one Pakistani woman. The intention was that once the course was completed, the qualified instructors would work in the community. Two women dropped out and only one qualified – a Bangladeshi woman. As Ms S pointed out:

"I think that Asian women would like an Asian face because of the communication and who they can identify with. I don't think it is essential but it helps

if they understand you. I act as a sort of social person when I'm in the pool. I just talk to them all the time. The number of women coming to the Sunday sessions has increased."

Ms S, a community worker in Oldham, felt that the availability of an Asian instructor was less necessary. Talking about some low-impact exercise classes held at the community centre, she argued that:

"Some women didn't warm to the Asian instructor. The lady we used to have went on maternity leave and an Asian lady came in – and they were not really that happy. I don't know if it was because they didn't like the way that she taught. The ladies who came here just wanted low-impact exercises, not the ones that she was doing."

During the research no other South Asian exercise facilitators were identified. The Oldham Leisure Centre did employ a South Asian receptionist for the gym facilities and the Birmingham EoP scheme had employed a South Asian health and fitness adviser.

Women-only sessions

It was generally agreed that Muslim women, in particular, do not like being in a mixed environment and that any sessions run within the community centres would be exclusively for women. This was feasible since many of the community centres were already running women-only sessions such as sewing and cookery classes. When facilities were available, there were possibilities of running a 'keep-fit' type of service.

Language

Language was seen as an important barrier to exercise by community workers. Ms S, a community worker and exercise instructor in Oldham, pointed out that:

"Communication is a big problem. How do you tell people about the benefits of exercise and show them how to get the best results if you can't speak to them. I think this is one of the biggest problems."

Another community worker in Oldham pointed out that:

"You know we get so many Bangladeshi women coming to the sewing classes because I can speak to them. I am here every week and they know that they can come to me if they have a problem with the machines or anything."

Attitudinal barriers to exercise

GPs attitude

Ms H from the Bhagini Centre in Leicester suggested that the low rates of uptake were

related to lack of interest by local GPs. She supported this point by indicating that all the patients referred were from one GP's surgery:

"We even gave them free tickets to our events so that they could see what we were about but they never came. One GP rang us up and asked if he could have another ticket to our Vahsaki function. That's not what it was about."

GP attitudes towards exercise were further highlighted when Ms H gave the example of her mother who suffered from asthma, which exercise could help.

"Her GP never advises her to do exercise and he is one of the GPs who can refer on to the scheme."

GP participation was therefore seen as directly related to the poor uptake of the scheme in Leicester and, in particular, to referrals to the Bhagini Centre.

"If you go to your GP and he says that exercise will help, you are going to listen to him because he is your GP. If a friend says, 'Come on, let's do some exercise', you won't go. You know our Asian community listens to their GPs, so if they said, 'Do it', they would."

This research has highlighted the general lack of commitment by GPs towards referral schemes. The narratives above suggest that GP participation and encouragement of patients to participate in physical activity is vital for the success of any EoP project. Subsequent sections of the report further highlight the lack of GP participation in EoP referrals.

EoP provider attitudes

Community workers considered that South Asian Muslim women's lack of interest in the 'Active for Life' referral scheme and towards exercise in general in the Leicester City area was attributal to EoP providers' 'stereotypical views' of South Asian Muslim women and to their lack of understanding. These views were specifically the idea that Asian woman did not exercise. As one community worker commented:

"...Maybe they haven't got proper awareness. Maybe the nurses need to get more involved."

The Leicester Bhagini Centre is still offering activities to patients on the scheme. Its continued commitment is reflected in the continued employment of the trained staff. In addition to GP attitude, Ms H pointed out that there seemed to be a general lack of interest amongst healthcare professionals. She argued that the West End Forum meets ever 3 months and that there was a need to do more but:

“...they just don’t seem to be interested in Asian women.”

It appears that there is a need to have a more inclusive approach to community centres, as South Asian Muslim women see these as a ‘comfortable, familiar environment where the women can enjoy full confidentiality’.

Comments from EoP providers

The EoP providers who were interviewed included the coordinators of the project, the health promotion officers, and EoP advisors. In some cases, the titles of the EoP advisors varied but their roles were generally similar. Their comments on structural and attitudinal barriers to exercise for South Asian Muslim women are presented below.

Structural barriers to exercise

Language

Language was seen as a barrier to exercise by the EoP providers, although the importance they placed on this varied. Ms S from the Birmingham EoP scheme pointed out that language was an important structural constraint on South Asian Muslim women.

“We [Leisure Provision] have problems finding people who can speak community languages and who can take an aerobics class because they have the qualifications. There are no official translators. People tend to bring their own families. With the women-only sessions, women translate for each other as they get to know each other.”

Ms S went on to point out that the language barrier was overcome at the Sparkhill Sports Centre because the health and fitness adviser was of South Asian origin and able to communicate in the local community language. It was apparent from discussions, however, that the employment of a South Asian health and fitness adviser was coincidental and previous advisers at the Sparkhill Sports Centre had not been of South Asian origin. This was significant because it acknowledged that language is a barrier to South Asian Muslim women’s participation, and also that there was no long-term policy to recruit EoP health and fitness advisers who may better serve South Asian Muslim women specifically and the local community in general. The employment of male health and fitness advisers was equally *ad hoc*, although there was clear acknowledgement that this could put South Asian Muslim women in an uncomfortable situation.

“When the scheme was set up, it just happened that the person employed was Sikh man. You have to give them the option of a woman if they prefer, because it does involve touching them – you’re measuring around the waist. They can have a female adviser. One of my colleagues will do it for you. In reality, people didn’t seem to mind – a few did but it didn’t seem to be a big issue.”

“If South Asian Muslim women request an appraisal by a woman, another EoP health and fitness adviser will take over. However, all the other advisers are white and do not speak the local ethnic language. Language does become a barrier at that point. One way of getting over it is to explain the appraisal first and then let another person take over. We can overcome some barriers but we’re not going to be able to overcome them all.”

In Blackburn the language barrier was acknowledged but again the coping strategies devised by South Asian Muslim women were mentioned as being sufficient to overcome any problems related to participation. All too often throughout the research, the EoP providers highlighted that ‘they cope with it’ or ‘they translate for each other’.

The referrals officer for the ‘Active for Life’ scheme in Leicester argued that language was not a barrier to the participation of South Asian Muslim women. She commented that these ‘women are happy with English’. However, she later commented that South Asian Muslim women would prefer Asian instructors. Research in other case-study areas indicated that preferences for Asian instructors were not simply based on commonality of culture or religion but also on language.

Communications problems were acknowledged and attempts were being made to resolve them on the Oldham ‘A Prescription for Exercise’ scheme. This was taking place through leisure centre initiatives, for example, employment of South Asian receptionists and instructors. These initiatives are strongly supported by the health authority. Dr R pointed out, with regards to South Asian instructors, that:

“We tried to make special provisions. We tried to identify a group of women and send them on the RSA [Royal Society of Arts] training course [the music and dance/aerobics leader training course]. There were difficulties in identifying women who were prepared to do it, so there were problems with staffing.”

Special provisions for South Asian Muslim women

No special provisions were made for South Asian Muslim women in some areas and any provisions

for women in general, such as women-only aerobics classes, gym work and swimming, had already been initiated prior to the EoP schemes. As Ms S from the Birmingham EoP scheme pointed out:

“These are not targeted just at Muslim women but at women in general. This wasn’t a problem when the EoP scheme was set up because they were already available throughout the city. In areas of higher Asian population that provision is more important. There is no set rule that each gym should have one [women-only] session. It is flexible according to the community.”

The Leicester ‘Active for Life’ scheme was similar. The referrals officer said that there were no special provisions for South Asian Muslim women and that ‘there are only the mainstream [courses] for women [generally] going on’. Other problems of provision that were highlighted were poorly scheduled and limited women’s sessions at the sports centres used by South Asian Muslim women; for example, the Spence Street Sports Centre held women-only sessions on a Thursday afternoon.

Lack of EoP scheme promotion

Problems with promotion occurred at three levels.

1. Poor communication with both patients and community.
2. Poor communication between providers.
3. Poor GP participation.

1. Poor communication with both patients and community

All of the EoP schemes had promotional literature, usually in the form of a small booklet that provided basic information about the scheme. The booklets raised questions, such as: What is it? Who is it for? Where is it? How do I access the scheme? The information was generally not translated and, when it was, as in the Blackburn ‘Fitness for Life’ scheme, it was simply a list of the above questions. As Ms S from the Birmingham EoP scheme pointed out:

“I don’t think we have any promotional literature in community languages. That’s not to say that we wouldn’t do this. Some Birmingham City Council literature is put into community languages.”

“If it would be beneficial, it is something that we could look into. It’s just if it is more worthwhile than anything else. It is difficult to say if it is ... needed, as people are so used to getting someone to translate anyway. Would people look? Would we put the leaflets in the right places? I think we would have to work quite closely with the local community and say, ‘If we do promote it, can we come to your group?’.”

Although some translated material was available, this was of little use to those South Asian Muslim women with literacy problems. There were no promotional videos.

Links with women and with the community as a whole were also seen as barriers to South Asian Muslim women participating in exercise. Dr R, the coordinator of the Oldham scheme, pointed to some anecdotal evidence and said:

“The uptake of South Asian Muslim women is low because we have no direct links with their community.”

Although there were some EoP promotional activities taking place that were dependent on individual initiative, there was no active policy in the case study areas to talk directly to South Asian Muslim women or to women’s community groups to inform them specifically of the local EoP schemes.

Ms S from the Birmingham EoP scheme highlighted some promotional activities:

“What we tend to do is give promotional talks just about exercise at, say, a 50+ coffee morning. I’ve also been to a temple. You tend to talk about the scheme because it’s local. Between 5% and 50% of those people might visit the surgery, so they could ask about it. So although that’s not what you go to talk about, you do. That’s quite good because you’re going out of your environment and saying ‘look what we’ve got on offer’. This is what we’ve put in place. We’ve got a ‘passport to leisure’ scheme, we have women-only sessions, with fully qualified staff, and they’ve got time to listen to you.”

“We found that a lot of people found out about it [the scheme] from the radio; you then got a barrage of ‘phone calls saying [that] ‘this is exactly what I want’. The problem is that the answer [to many of these callers] is ‘no’, unless their GP’s surgery is part of [the scheme]; otherwise it would be a self-referral thing, and anyone who wanted to could join. It’s a shame, because you feel that you’re being negative, but they may live in an area that’s miles away from a surgery.”

The problems of promoting the schemes and the lack of quality of service for South Asian Muslim women were generally put down to limited financial resources.

2. Poor communication between providers

This appeared to be one of the central structural problems with all EoP schemes. The results suggest that there is limited communication between the various parties involved in the running of the schemes. The GPs seemed to be the least aware of

what was available and the community centres felt 'left out in the cold'. This is surprising since, for most South Asian Muslim women, these were the first two ports of call if they needed to discuss any issue that concerned them. Ms S from the Birmingham EoP scheme said:

"We have found that it is quite difficult to promote it with the primary health groups within the health authority ... because they were changing from being fundholders to becoming primary health groups it wasn't an option."

West Pennine Health Authority was particularly aware of this problem and is currently trying to establish links between fitness advisers and practice nurses. The coordinator has annual meetings on each site to foster better relations between practice nurses and leisure centre staff. She is also involved in developing the scheme with the charity, Age Concern. This new initiative involves an Age Concern volunteer being trained in all the different opportunities available on 'A Prescription for Exercise'. Once training is complete the volunteer can act in place of the fitness adviser at the leisure centre. In this way older patients can be directed to the Age Concern fitness adviser for a more specialised service.

3. Poor GP participation

Although lack of GP participation in the EoP schemes can be partly attributed to poor communication between the EoP providers, it could be suggested that it is also a reflection of the lack of commitment to exercise and EoP schemes 'because exercise is not at the forefront of their minds'. As mentioned earlier, the 'Active for Life' referral scheme in Leicester was piloted at the Bhagini Centre. The scheme coordinator considered that it had not been successful and her comments echoed the opinions of community workers when she pointed out that:

"They got four or five people but it really didn't get off the ground. We had a problem, I would say, with many GPs in that area – the West End of Leicester where there is a high Asian population – they were not referring."

Leicester's 'Active for Life' EoP referrals officer suggested one reason for this. She pointed to the problem of possible litigation against GPs as an increasing deterrent for GP involvement in the scheme. Ms G pointed out that doctors are still responsible and liable for any problems with patients and, as an example of their concerns, three GPs withdrew from the scheme because of an article in a medical journal. Problems of litigation as well as general health and safety

measures were also seen as the cause of not bringing community centres into the scheme. It was, however, suggested that links with neighbourhood centres would be the best value partnership.

Attitudinal barriers

South Asian Muslim women's attitudes

Dr R, the coordinator for the West Pennines Health Authority's 'Prescription for Exercise' scheme commented:

"The general feedback is that exercise is not a high priority for South Asian Muslim women and it is not seen as something of particular value. Many of the concepts around investing in ... your health are not familiar to South Asian Muslim women."

The referrals coordinator for the Leicester 'Active for Life' scheme pointed out that:

"Many Muslim women who get on to the scheme don't stick to it."

Children and religion were seen as a problem.

For Ms A, the 'Fitness for Life' assistant in Blackburn, the problem was one of a stronger commitment to family, especially children. Ms B from the Birmingham EoP scheme saw the solution as one of more education about the overall benefits of exercise to health.

GPs' attitudes

Attitudinal barriers were seen as a problem for GPs as well as for South Asian Muslim women.

Ms A pointed out that:

"It could be their perception that people won't go. Maybe it's not high priority and they have other issues, which are more important. They know about the scheme [and] they want to be involved but they don't actually do anything ... We need GPs to promote healthy living."

Overall, she was aware of the problems of the scheme, which she summarised as not being committed to community development and being financially driven. Since the research was carried out, she has addressed these issues with colleagues.

Comments from leisure centres

Structural barriers

Access to facilities

One of the structural barriers that was unique to the Oldham 'A Prescription for Exercise' scheme was that South Asian Muslim women were not eligible for an EoP prescription if they had previously used the facilities. Consequently,

some of the women interviewed during the Sunday evening sessions at the Oldham Sports Centre complained that they were not being allowed to use their prescriptions. Exercise without a prescription was too expensive. This reiterates the problems of poor communication between EoP providers. Without realising that this was not scheme policy, GPs were issuing prescriptions to women who had previously used the facilities.

Access was not seen as a problem for South Asian Muslim women in either the Birmingham EoP scheme or the 'Fitness for Life' scheme in Blackburn, as the Sparkhill Sports Centre and the Audley Sports Centre, respectively, were located within walking distance of the South Asian Muslim women's homes. The Oldham Sports Centre acknowledged the women's transport problems and has applied for funds to purchase a minibus and employ a driver to bring South Asian Muslim women to their facilities.

Childcare facilities

It was suggested that lack of childcare facilities were an important barrier to South Asian Muslim women's use of facilities. Improvements to facilities would include the provision of a crèche, although it was acknowledged that space at the Sparkhill complex would be a problem. The problems of lack of childcare facilities are reflected in the comments of South Asian Muslim women highlighted above.

Women-only sessions

Special provisions for South Asian Muslim women were highlighted as women-only sessions when using the gym and for swimming and the sauna. Mr G pointed out that this was particularly important for South Asian Muslim women, because they do not like men being around. Muslim women are more orthodox than other South Asian non-Muslim women. There are generation differences as well.

Language

Other problems were lack of Asian staff, unfriendly staff, and problems with travelling to the facilities.

"A lack of Asian people at the leisure centres means that if they [South Asian Muslim women] find that no-one understands them after all that effort and so, on their first visit, they do not obtain what they came for, then that throws them back ... too far."

The exercise facilitator considered that if there were more Asians at the first point of contact, this would encourage women to return to the facilities.

She also commented that the target group should be the middle-aged:

"It works in two ways. They promote it in the community and with their youngsters. These older women are more respected in the community and in the home. All these things help to break down barriers."

Asian staff would also mean that there would be fewer language problems:

"It's about communication as well. You need language to make women feel at home."

Culture as a barrier

Culture was not seen as a significant attitudinal barrier at the Sparkhill Sports Centre, as it is on the doorstep of the community. Women do not have to travel distances that may give their families cause for concern about safety. The health and fitness adviser was also aware of possible religious barriers, specifically the need for Muslim women to exercise in a men-free environment, thus respecting male-female dynamics within Islam. In addition, it was important not to hold women-only sessions on Fridays (Jumma), the Muslim holy day.

Attitudinal barriers

The attitudes of South Asian Muslim women's families and the community were seen as a problem. For one respondent the solution was:

"Getting women to break down the barriers at the start; we need to have women in the community convincing other women, husbands and the community that this is what they should do."

"The NHS has to show them [South Asian Muslim women] how to use these prescriptions and show the sports centres how to receive them. If there are misunderstandings at the beginning, then women lose the confidence to access the facilities again."

Comments from GPs and their staff

Structural barriers

The research suggested that GPs' interest in EoP depends to a large extent on personal interest in physical activity and its benefits. The opinions of GPs and their practice nurses/managers varied considerably across the schemes.

Special provisions for South Asian Muslim women

Special services for South Asian Muslim women in general practices were limited:

“None really but we do have an Asian receptionist. She’s only here part-time but we’ve had to use her to interpret. But usually the women bring along someone who can speak English.”

“Actually we do have leaflets translated into the appropriate languages for women. We send out promotional material in different South Asian languages. For example, our leaflets on smear tests and asthma.”

However, there were no leaflets available on EoP in the appropriate languages.

As one practice nurse in Blackburn pointed out:

“Many of the women who come here just ... communicate, if you know what I mean. There don’t seem to be too many problems and, anyway, they always bring someone who can speak a bit of English with them if they can’t speak it themselves.”

On the whole, the general practices contacted considered that the services offered to South Asian Muslim women were satisfactory. For example, the practice manager of one surgery in Oldham considered that:

“The services available to South Asian Muslim women are adequate and any requests for improvements or new services should come from the patients.”

Many patients will find this difficult, as they may lack the confidence and support to ask for improvements in services.

Transport

In some general practices in Oldham, Bradford and Leicester, transport was seen as a problem for South Asian Muslim women.

As one GP in Bradford pointed out:

“...I think we need to address the problem of transport. A lot of women are unable to get ... to the centres.”

A GP in Leicester commented:

“...Sometimes I think that if we had a bus service or something for these ladies – it is possible, because other groups in Leicester have them, like elderly people’s groups – then these women would go, especially since security problems would have been overcome.”

Communications with other EoP providers

As discussed above, communications between GPs and leisure centres were poor if they existed at all. Although GPs, practice nurses and managers knew about the EoP service, most were not aware of any special services available for South Asian Muslim women or women in general, such as, women-only sessions. This is surprising since, for example, in

the cases of the Blackburn and the Birmingham EoP schemes, the referring surgeries were literally a few minutes from the leisure centres. The situation was better in Oldham, where the role of coordinator was clearly delineated within the Department of Health Promotion, and in Leicester, where this type of liaison was one of the roles of the referrals officer.

Attitudinal barriers

In Bradford, the general response from the GPs and practice nurses and managers interviewed was that they were in favour of the BEEP scheme. It was seen as an opportunity to improve the health of patients. It was not just a positive facilitator for physical health improvement but also a mental facilitator. The following comments highlighted this.

“BEEP is a practical way in which patients can be taught the benefits of exercise in a safe environment with expert guidance.”

“BEEP is far more likely to help than simply giving advice that, on its own, is too abstract to be of any use.”

“It is useful to be able to direct patients with unhealthy lifestyles towards an exercise programme that improves their general condition. This prevents unnecessary prescribing of medicines.”

“In my opinion exercise is not just a physical thing, it’s also a mental thing. It gives you a feel-good factor once you’ve done it – but sometimes you really need to push yourself. I consider that exercise is really important and I really enjoy it. I would rather take exercise than tablets.”

“I think it’s important because it tries to educate people about seeking alternative treatments to tablets. It’s also a good way of encouraging disadvantaged people.”

GPs were not very happy when patients they referred to BEEP did not attend the initial session or when they withdrew from the programme after one or more sessions:

“Sometimes the patients who are referred do not turn up for the programme when they say they will, and other times there’s not a lot of involvement from Simon’s team and this is important.”

Other surgeries that had referred patients to the Birmingham and Blackburn schemes were also positive about the GP referral scheme.

“We can see the benefits to the patients and that’s always a good thing.”

“All women have access to information on exercise. We encourage them to take it up and we tell them about the benefits but it is up to them whether they do it or not.”

In the other case study areas, the research highlighted an overall lack understanding of the EoP referrals process. One practice nurse from Leicester pointed out that ‘she didn’t refer as she was unsure what the referral procedure was’. This was unusual as the *Active Lifestyle: Referral Scheme Protocols* for Leicestershire primary healthcare teams should have been supplied to all GPs’ surgeries.

The practice manager at another surgery said that that she couldn’t remember if anyone had asked about the scheme. She did not seem to know much about the scheme specifically and commented that, as far as she knew, patients had to take the initiative and ask to join the scheme:

“They bring the form in and the doctor signs it. They find out about it themselves. If anyone comes and asks us about it, then we tell them where to get the forms. There are notices about exercise. I don’t know if they are about the referral scheme but if they want information and want to know more about it, they can go to the receptionist and ask. There is publicity available about the different places where they can go [to exercise]. I can’t remember anyone requesting it.”

Thus, for this practice manager, the onus was on the patients. This is difficult for South Asian Muslim women who may not be able to read the publicity material because of language and literacy problems (as mentioned earlier there is no translated publicity material for the ‘Active for Life’ referral scheme); lack of information from the GP or practice nurse/manager means that they are involuntarily excluded.

Summary of issues

The key issues have been analysed under the headings of structural barriers and attitudinal barriers. In spite of the schemes containing many areas of good practice, with some special provision

made for South Asian Muslim women, there appears to be a reasonable consensus about the issues relating to the concerns and difficulties experienced by these women, some of which have been highlighted in the literature. For example, on the structural issues, South Asian Muslim women, community workers, EoP providers, leisure centre staff and GPs all mentioned issues relating to access to facilities, cost, language, women-only sessions and childcare facilities. The attitudinal issues that were generally mentioned related to cultural and religious codes of conduct, South Asian Muslim women’s attitudes, and GPs’ attitudes. Poor communications problems between agencies, and between agencies and the community, were particularly highlighted both by community workers and EoP providers. It also appeared that, in some schemes, procedures were not as clear or well understood as they should have been. There was some criticism of other parties: for example, South Asian Muslim women and community workers criticised some providers’ and GPs’ attitudes to South Asian Muslim women, and some EoP providers and leisure centres criticised GPs’ and South Asian Muslim women’s low interest in the schemes. The comments often revealed the problems of poor communications between the different parties, which need to be addressed. These issues are dealt with in more detail in chapter 10, so are not repeated here. Clearly, the lessons for the pilot intervention programme are:

- to reduce the barriers to exercise, making special provision for South Asian Muslim women in relation to access in the form of better and appropriate promotion, use of appropriate languages, reductions in costs, provision of women-only sessions, provision of crèche facilities, and empathy at points of contact
- to have good communications between GP referrers, coordinators of the programme and programme instructors and assessors.

Chapter 9

The pilot intervention programme (‘Exercise to Health’ in Beeston)

Aims

The main aim of this stage of the study was to demonstrate, through action research, how EoP schemes could be developed to promote physical activity among South Asian Muslim women. Some of the issues identified and ideas on good practice gained from the earlier stages of the research were to be incorporated into the scheme. Procedures and measures for evaluating the scheme were to be included. The plan, through the action framework, was for a researcher to work **with** the organisers of the scheme throughout.

In order to set up the pilot programme, it was necessary to select an organisation with an appropriate sample of South Asian Muslim women within its area that could respond quickly to establishing an EoP scheme. This meant that the organisation had to have staff with a knowledge of EoP protocol and procedures, who were able to obtain the support of GPs, and were committed to establishing a scheme for South Asian Muslim women. They would also have access to appropriate centres for the physical activities and an ability to obtain funding. There were discussions with several organisations, most of whom could not respond quickly enough. Leeds Leisure Services met the criteria and were selected.

There were four GP referral schemes in operation in Leeds during 1994 and 1996 concentrated in Morley, Wetherby, Middleton and Armley; these were jointly funded by Leeds Healthcare, Leeds FHSA (now Leeds Health Authority), individual GPs and the Yorkshire Regional Health Authority.⁹⁴ The rationale behind these schemes was to refer patients who were at risk of osteoporosis and CHD, and who were not participating in any form of physical activity. Patients undertook an exercise programme over a 5-week period, involving ten sessions of physical activity at a gym. However, problem areas became evident; these were mainly related to the aims of the schemes, which were sometimes ambiguous, and the recruitment of patients, particularly women, and the data did not always reflect the aims of the schemes.⁹⁴

GP schemes were no longer operational in Leeds and any exercise schemes were usually self-funding and not directed by GPs.

Methods

The ‘Exercise to Health’ pilot project was introduced in the Beeston area of Leeds in January 2000. Beeston was selected as having one of the highest concentrations of South Asian Muslims in the area. Discussions between the Exercise and Fitness Development Officer and an executive lead nurse representing the South Leeds Primary Care Group and Leeds Health Focus in October 1999 led to the development of a pilot project investigating South Asian Muslim women’s needs in EoP schemes. The outcome of the meetings resulted in the development of a programme that would not only be used as a pilot project in the Beeston area but also could be replicated in other areas. Another reason for Beeston being selected was concern about particularly high levels of heart disease and diabetes in its South Asian community. The aim was to target women who were considered at risk.

The model used for the ‘Exercise to Health’ project was adapted from one that had been used in the successful ‘Heart-watch’ and ‘Diabetes-watch’ projects in South Leeds. In these schemes, patients could be referred by a GP or consultant or could refer themselves to the scheme; the latter case, in which the GP was not the first point of referral, was seen as a ‘negative referral’. The heart- and diabetes-watch schemes were self-funded citywide schemes, owned and operated by the City Council; they were not EoP schemes. The procedure for the ‘Exercise to Health’ scheme, as adopted in this study, was as follows.

- Programme is promoted.
- Patient hears of the scheme and self-refers to the scheme.
- Exercise and Fitness Development Officer writes to the woman’s GP to explain the self-referral and to investigate whether there are

any health reasons why she should not be admitted to the programme.

- GP replies to the Exercise and Fitness Development Officer.
- If the reply is positive, an experienced and trained project worker screens the woman using physiological measurements of height, weight, waist size, blood pressure, glucose and cholesterol levels.

The following procedures were also adopted for this project.

- Initial interviews held, and attitudinal and behavioural questionnaires completed, with South Asian Muslim women.
- Women begin classes.
- Physiological measurements made and interviews undertaken 6 weeks later.
- Project worker provides feedback to Exercise and Fitness Development Officer.
- Information feedback to GP.
- If further funding available, exercise classes would continue, with physiological measurements and questionnaires completed, and interviews carried out at specific intervals. However, the funding for this research project did not allow for the questionnaires and interviews to be completed after the project. It was considered that 6 weeks was too short a time before re-testing the questionnaire, so only interviews were carried out.

The 'Exercise to Health' project was funded in the short term by this study and by a grant of £3000 received from South Leeds Primary Care Group. Applications to gain funding from other organisations were ongoing. Women were recruited by a multiplicity of promotional strategies. During the month of Ramzan (December 1999), broadcasts were made on Radio Ramadan, a radio station aired specifically for the month of Ramzan. Also posters/circulars in Urdu were put up in public meeting places. Existing community groups were approached and told of the project, and interest was generated by word of mouth. GPs were informed of the project and asked for assistance. There was no resistance from community or religious leaders, and support from these groups was particularly appreciated. By these methods, women heard about and applied to go on the scheme, but restrictions on space and number of instructors meant that only 36 applications were accepted. There was a need to identify South Asian Muslim women who had health risk factors and who were also in the contemplation or pre-contemplation phases of exercise behaviour.

The special provisions for South Asian Muslim women that had been identified as good practice and were incorporated included:

- a bilingual female health and fitness assessor, instructor and researcher
- the use of local centres within the community
- women-only sessions
- crèche facilities
- no charge for the exercise programme
- promotion of the programme through the community, in appropriate languages
- exercise programmes twice weekly, moderate type of exercise, suitable equipment.

Data were collected using a multiplicity of methods, as follows:

- analysis of data/annual report(s) on previous EoP schemes in the selected case study area
- initial interviews, physiological measures, exercise behaviour and psychological measures with South Asian Muslim women
- interviews with scheme providers
- follow-up interviews with South Asian Muslim women.

A total of 15 women took part in the initial interviews at the start of the exercise programme. Using the interview schedule as a guideline, these were usually undertaken on a one-to-one basis, although some women chose to be interviewed with a friend who was also involved in the exercise scheme. Some women found it difficult to leave their young children with another relative, so they brought any such children to the interview. The interview lasted about 20–25 minutes, during which the behavioural and psychological measures were completed. Follow-up interviews took place 6 weeks later. At this stage seven South Asian Muslim women (five who had taken part in the initial interviews and two not involved at that point but who asked to be included) were interviewed. At both stages, all the women expressed a preference for the interview not to be recorded; hence, detailed notes were taken. An in-depth interview was also conducted with the organiser and the instructor for the scheme. A number of meetings were arranged with the worker employed to carry out the screening and deliver the exercise programme, during which details of the scheme were discussed. A total of 12 GPs were asked to participate in the interviews; however, none of them responded.

The exercise classes took place at a church hall in the heart of the community. The hall could be

sealed off so that the women had exclusive access, and crèche facilities were available to meet the needs of women with children under school age. Classes took the form of low impact step-aerobics for 1 hour each on Tuesday and Thursday afternoons. A bilingual South Asian Muslim instructor took the classes.

The literature review had indicated that it was appropriate to evaluate schemes in terms of outcome measures: that is, health risk factors (physiological) and psychological/behavioural (self-efficacy, stages of exercise behaviour, attitude, constraints). The literature and case studies also indicated that there were particular issues in constraints and attitudes to exercise for South Asian Muslim women, which suggested that these should be taken into consideration when designing the questionnaire. In addition to outcome measures, the literature review and case studies also pointed to the importance of process evaluation through qualitative methods. In the pilot intervention programme it was of particular interest to see whether the measures featured in the programme to overcome the constraints were working from the point of view of both the South Asian Muslim women and the providers of the scheme. Thus, in-depth interviews with both of these groups were undertaken. Details of the methods are given below.

As already indicated, the intervention programme followed the procedures of previous Leeds schemes. These included measurements of the risk factors: that is, waist size and weight, blood pressure, glucose and cholesterol levels. All measurements were carried out before the exercise programme commenced, and repeated after 6 and 14 weeks. Briefly, the methods were:

- tests for blood pressure, using a mercury sphygmomanometer
- blood sugar and cholesterol readings, by pricking the index finger, taking small blood samples on glucose and cholesterol strips, and inserting them into an analyser (Accitrex GC®).

The psychological/behavioural questionnaires (see appendix 3) had four sections. The first related to stages of exercise behaviour and consisted of one question with a choice of answers. This had been adopted from Marcus and colleagues⁹⁵ using response choices from the stages. The second section consisted of eight self-efficacy questions on a 5-point Likert scale, also adapted from the same source.⁹⁵ Similar adaptations of the first two sections were

successfully used in the Barnett Health Authority study.⁹⁶ There were 19 questions in the third section, again on a 5-point scale. Nine of these were used in the Barnett study and the remaining ten were constructed specifically for this study and related to particular constraints found in the literature and the case studies. The final section consisted of nine statements on a 5-point scale that related to attitudes to exercise. These were again adapted from the Barnett study.⁹⁶ The questions were adapted for the particular target group. All these statements were scrutinised by a group comprised of researchers, health professionals and exercise psychologists. The original plan had been for the researcher to administer the questionnaire on a one-to-one basis at the initial interviews before the programme started, with follow-up interviews at 14 weeks. However, because of funding restrictions, only the initial questionnaire was administered; it was considered inappropriate to administer it again after 6 weeks as this was deemed to be too short a period. Because of the restrictions in time and numbers of women agreeing to be interviewed in the time available, only 14 of the 36 women completed the questionnaire.

In-depth interviews were used to discuss the issues in more depth both before and after the programme. A semi-structured schedule was constructed to act as a guide (see appendix 4). There were also schedules for the coordinator and instructor and they were interviewed together. However, there were also ongoing discussions between them and the researcher throughout the project. Originally it had been planned to hold interviews at 6 and 14 weeks but only the initial and 6-week ones were carried out. Because of restrictions in time, only 14 women were interviewed in the initial phase. The conduct and the analysis of the interviews followed the pattern adopted in the case studies and given in the methods section.

Both the project coordinator and the researcher were multilingual South Asian Muslim women. The project coordinator was trained to carry out the screening and testing, and qualified to take the exercise classes. The researcher carried out the interviews and questionnaire administration.

Outcomes and findings

Measurements included the numbers of women who enquired and applied to join the scheme, attendance at classes, physiological measurements,

exercise behaviour and psychological measures; qualitative analysis included the perceptions of providers and clients through semi-structured interviews and questionnaires. In view of the short time-span of the programme and the restrictions on time, the physiological measurements were used as a screening device and not as outcome measures here, although Leeds Focus intended to make use of these as outcome measures in a later evaluation. Also, as the questionnaires were only completed at the initial stage and by only a small number of South Asian Muslim women, only a summary of the findings from these are presented.

The initial indications were quite clear. There was far more demand for the service than could be provided, as there were far more applicants than places available because of restrictions on space. Attendance was good – all but two women attended five or more sessions.

South Asian Muslim women's perspective: questionnaire results

In all, 14 questionnaires were completed. Results showed that ten women currently exercised but not regularly and two had only recently started to exercise, so these two may be regarded as in the preparation or contemplation stage of exercise behaviour. Only two were exercising regularly.

For most of the women, the issue of their desire to exercise being constrained by lack of crèche facilities was a key concern. For example, six of the women who had children agreed with this. Nine women felt more confident with exercising when they went in groups rather than on their own. This could suggest that a support network was important for the women and that the socialisation aspect was also a positive factor in encouraging social contacts rather than working in isolation from other women on the scheme.

Most women agreed that they had to make time to exercise and that family and other commitments should not interfere with this. Eleven women strongly agreed that they wanted to exercise more but only if more women-only sessions were put on. This was replicated in another statement in which women were strongly in favour of exercising more if there were women-only gyms. This reflects their allegiance to Islam. Ten women felt uncomfortable if men could see them exercising.

Most of the women were competent in spoken English although not all were competent in written English. Thus, many of the women (six) disagreed with the statement that women would exercise

more if the exercise providers were bilingual. All the women strongly disagreed with culture being a barrier to their exercise activities. The issue of exercising more if there was more appropriate Islamic dress was not a concern for any of the women. This suggests a feeling of confidence in exercising in an all-female exercise environment.

The issue of finance was raised in a statement relating to exercise clubs and classes being too expensive. Five women agreed strongly compared with only two who did not see any financial implications. Thus these women were encountering a barrier to exercise. Six women thought that they would exercise more if facilities were kept local. This suggested that women might not have access to their own transport and were reliant on facilities that were within easy reach of home, preferably within walking distance. This was further strengthened by the responses to another statement related to exercising more and taking on a variety of exercise activities away from the local centre only if transport facilities were laid for them. Seven women felt strongly in favour of this. This suggested that women wanted to participate in various forms of exercise but were being constrained because of a lack of local facilities or convenient means of transport to them.

More women felt confident when they exercised in the summer rather than the winter months because the days were longer. Eight women considered that they would be more confident in themselves if they exercised more and regularly, and ten women considered that exercise would lower their stress levels. Nine women felt better mentally if they exercised. This confirmed that women felt not just the physical benefits but also the psychological benefits of exercise.

South Asian Muslim women's perspectives: initial interviews

The women's perspectives are presented here with their reference numbers in parentheses. Women joined the exercise programme for a variety of reasons, weight loss and physical matters being the most common.

"Definitely some weight loss and some extra confidence in myself generally, but also to become more healthy." (012)

"I want to look and feel healthy. I want to look at my diet and eating habits and see what I need to change." (001)

"Just to be fit and healthy and to lose some weight." (010)

Women were asked about their main motivation for exercising. For some it was health because, if there was a family history of diabetes and heart disease, exercise was a way of reducing their chances of experiencing these.

“My family has a history of diabetes and heart disease so I need to be extra careful with my health. The main reason I exercise is to learn how to be healthy in the long term and to pass this knowledge on to my children.” (013)

“Mainly to see some change to my physical appearance, you know, my weight. Then there’s the socialisation part as well – exercising on your own is lonely; then overall to ‘feel good’ and feel fresh.” (002)

“I want to socialise because if you spend too much time on your own you become depressed. By exercising I think I will lose weight and be in control of my asthma.” (009)

It can be seen how social reasons are also linked to health in the above responses. Thus, social reasons can have an overall impact on well-being.

As some women indicated, there were no hindrances to exercise, and others’ access to exercise was helped or hindered by the availability or not of transport and crèche facilities.

“There’s no real hindrance for me, not even caring for my husband, because I think it is important to make time for yourself to relax and know yourself. I handle this well, which is why I do not find it a constraint.” (006)

“I have three children. These sessions take place when two of the older children go to the Mosque, which is good. I take the youngest to the crèche at the hall but, as far as family or anything else is concerned, I do not have any restrictions on exercising.” (015)

“My family is supportive and does not hinder me but other issues, such as childcare, are important. I mean there aren’t enough crèche facilities available for mums with young children. Also, transport is a restriction. It would be good to have transport to take you to and from exercise venues. I go to college but that isn’t a hindrance.” (008)

One woman suggested that crèche facilities should be improved.

“My young child doesn’t like the crèche here at the exercise programme because he gets bored, so my mind is divided with thinking about my child and the exercise I am supposed to be following. I think the problem could be solved if the children had more toys to play with ... and the hall is too small and dark; it’s really claustrophobic.” (003).

The women were on low incomes and hence their ability to pay for exercise classes was very limited.

“There’s the cost side; I can’t really afford to do more exercise – although I want to – because it can be expensive.” (003)

However, the exercise classes were so much in demand that women were willing, as a last resort, to pay for them if they had to – but only if the classes were kept local.

“It’s a really good investment so I would probably pay anything up to £5 per session. I know how expensive it can be to join a gym, so paying around £5 would be OK.” (007)

“... although I don’t think we should have to pay ... I would pay about £2–3 for each session.” (006)

South Asian Muslim women’s perspectives: follow-up interviews

The follow-up interviews had many themes. The women were asked about what their expectations had been at the start of the project and what they had gained over the past 6 weeks or so. Very positive feedback was received and it would certainly appear that women’s expectations have been fulfilled by the programme.

“Made me much more healthy. I feel stronger emotionally. I can walk a lot more without getting tired.” (007)

“[I’ve] lost two pounds in weight, lost two inches and also [made] a change in my diet.” (016)

There also appeared to be positive behavioural changes in the women since starting the exercise programme. This indicates a positive influence and impact on their lives.

“I sleep better and feel more relaxed with myself. I have more flexibility in my muscles than before. I feel more confident too. I think I have become more active compared with before I started these exercise sessions. I have that ‘get up and go’ feeling whereas before I used to be lazy.” (007)

For one South Asian Muslim woman, the behavioural changes were very significant since she had a history of depression and was receiving medication for this. However, since exercising she has been able to sleep better without depending on sleeping tablets and also feels less depressed.

“[I] can sleep better; [I] used to take sleeping tablets before but haven’t been now for one to one-and-a-half months; [I am] able to walk more and am physically more mobile.” (017)

Women were more than happy with the way the scheme had gone so far; even those who had not

joined with any expectations were really pleased with it and the results they could feel and see. In terms of future planning, women raised a number of important issues and made some useful suggestions.

"Transport – [I] want to be able to join other classes, such as swimming, away from the area and have more consultation after exercise classes." (016)

"I would like to see more consultation after each of the exercise sessions between the instructor and the women, so we can talk about health, diet and what the exercises do for different parts of the body. It would motivate us more and also I think that the timing of sessions should be considered. It would be good to have sessions at different times – you know, evenings and during the day." (013)

This is a very positive suggestion that could well be taken up if resources were available.

Respondents felt happier and healthier, and had a positive outlook to continuing to exercise in the future, but there were concerns that classes should be kept local and perhaps take place in a bigger hall.

"Yes, if classes continue locally; if classes are withdrawn I would still go but transport has to be available otherwise we women will be losing out." (007)

Summary and conclusions

Women were happy with the scheme and the results, and were more than willing to let other people know about it and even recommend it to others:

"Yes, definitely – it's an excellent programme." (011)

None of the women had experienced any difficulties in terms of accessing the programme from the points of view of their families. However, there were problems related to the programme. The demand was too great for the programme, so places had to be limited to 36; this meant that others were put on a waiting list, which was unfortunate since the women really wanted to participate. An opportunity had clearly been lost here to widen the net but this was something the Leeds Leisure Services could demonstrate when seeking additional funding to extend the course. Women also wanted an expansion of activities. The most commonly referenced activities were all-women swimming sessions, saunas and equipment.

"More facilities like saunas – the sweating would be good. Some weight training and more sessions in the week." (0003)

"[It] would be good to have a bigger, more open space, with lots of machines to exercise on." (011)

The project appears to be a success so far, not just from the points of view of the women who are involved but also from the perspectives of scheme providers.

"The project has been very successful, even more so than we could have imagined. The demand is there, which justifies having a service like this, and the scheme has also raised interest from a multi-agency point of view. Very useful and therefore demonstrates demand from the community for services to be delivered in the community. It has also raised awareness of health issues and the need for women to take exercise. It also shows willingness by the primary care groups to work in partnership and to address local health inequalities using a suitable model, which can be replicated, in surrounding areas." (EoP organiser).

Limitations

In this pilot programme, the period of the exercise programme was 6 weeks. This was deemed too short to satisfactorily retest the questionnaire, so the women did not complete the behavioural and psychological measures again. It was not possible to extend this period because funding for this research project by the NHS ceased. Leeds Leisure Services continued with the programme for a further few weeks and were applying for funding for it to continue after that.

The statements which were developed specifically for South Asian Muslim women on exercise behaviour, self-efficacy and constraints appeared to be satisfactory but the sample size was too small to use statistical techniques to test the validity and reliability. Further research is therefore required for this purpose.

There are a number of difficulties in setting up intervention programmes with health authorities and leisure organisations. These difficulties may be compounded when more than one agency is involved, as cooperation has to be achieved for joint working. The main difficulty relates to the time it takes for organisations to establish schemes, procedures, apply for funding, obtain the commitment of staff and partner organisations. The second main difficulty relates to funding, particularly when it is required at short notice. Funding has either to be available, or a source of funding has to be located and applied for, which again may take time. In this pilot scheme, a third difficulty related to the timing of the interviews

and measures. These had to be completed just before the programme and at the end. A bilingual researcher was used but it was

impossible to conduct more than a small number of interviews. More researchers are required to complete a larger sample.

Chapter 10

Summary and implications for practice

A number of key issues have been highlighted in the study, relating to EoP providers and provision in general and, specifically, to provision for South Asian Muslim women. These key issues are fundamental to the operation of EoP schemes and have serious implications for all parties within the schemes and for the effectiveness of schemes. They also have implications for the NHS, as GPs are the referrers and the health authorities, normally through health promotion units, are the coordinators, organisers and promoters of these schemes. The implications specifically relate to whether the EoP schemes:

- are effective in motivating at-risk patients to take exercise and in providing programmes for them
- are effective in terms of health and other patient outcomes
- are effective in targeting South Asian Muslim women and other specific groups
- are cost-effective
- follow acceptable protocols and procedures
- are effective in linking the different parties within the schemes
- carry out effective monitoring and evaluation procedures.

The key issues that address these points, which relate to providers and provision, and to South Asian Muslim women, are presented below, followed by the implications for good practice.

Key issues relating to providers and provision

It must be stated first that there are many good schemes, with clear protocols and procedures and with excellent facilities and programmes. The case studies in this research provided some examples of good practice. However, the research also indicated that many schemes suffer from some shortcomings, and it these that are highlighted.

There are three key themes relating to providers and provision that transcend a number of more specific issues and which, in turn, raise issues. These can be summarised as follows:

- EoP providers, focusing on their functions, procedures and communication
- institutional provision, focusing on access, facilities and availability
- resources, focusing on finance and staffing.

EoP providers

EoP schemes are relatively new and a phenomena of the 1990s. The schemes normally depend on a number of agencies who have not traditionally cooperated or have not normally had the opportunity to cooperate, such as the NHS providers (general practices), the Family Health Service Authority, health promotion units, and local authorities (health promotion/management units and leisure services). Each agency has different functions, both generally and with regards to EoP schemes. For example, GPs and practice nurses carry out medical assessments and prescribe treatment; health promotion units coordinate and promote a scheme; leisure services carry out physical fitness consultations and arrange physical activity and exercise programmes. These differing functions have given rise to a number of issues that may be summarised as follows:

- communications between the different organisations
- inadequate procedures and monitoring
- poor awareness and access to the procedures and provision of other organisations.

It would be unfair to see these as leading to a critique of the attitude and commitment of EoP providers. Our research indicated that the continuation and success of many schemes very often depended on the commitment of staff, in spite of many difficulties, such as inadequate funding. The problems relate more to the multi-agency approach and a lack of clarity over roles and functions or procedures, which may result in the system for EoP provision not functioning as well or as effectively as possible.

- GPs' interest in the scheme may be variable even within the same practice, as they may be uncertain about what is available, the screening and monitoring procedures, and the qualifications of the staff conducting the activity programme. Some GPs are

concerned about legal and liability issues. It may be preferable to drop the title of 'exercise on prescription' in favour of 'exercise referral' or 'exercise recommendation'.

- Staff at leisure centres may not be used to dealing with certain medical conditions; they have been trained to deal with fit and healthy people and may not have the qualifications for dealing with 'at-risk' patients. Other staff/instructors may be uncertain whether they have anyone from an EoP scheme in their group. This appears to be overcome when there are specific GP referral officers employed on site, as in the case of the Birmingham EoP scheme.
- Health promotion officers typically have other duties, so have limited time and resources to devote to EoP schemes.

The main problems arise from communication and procedures.

- There are not always adequate or sufficient meetings between the agencies/parties involved in EoP. On the whole they continue with their roles and functions without full reference to the other agencies/parties.
- Staff in some agencies have negative perceptions of the attitude and commitment of staff in other agencies. This often appears to arise because of lack of consultation between the parties.
- It would appear that there are not always written protocols that make all the procedures, roles and functions for the different agencies clear.
- Communication is often left to individuals and is the responsibility of nobody in particular; thus good communication may occur by chance or depend on an enthusiastic individual.
- Steering or advisory groups of representatives from all interested parties may not meet frequently enough and the outcomes of any discussions may not filter down to those concerned. Further, there may be no facility for meetings to include representatives of the public or community leaders. Consequently, there are often no direct links between community and agencies involved in EoP schemes; in the case of South Asian Muslim women, such links appear necessary to encourage participation.
- Direct links between GPs and leisure centre staff do not usually exist and contact is normally through a third party, such as a health promotion unit/officer. As a result, GPs do not normally know the full extent of provision.
- Procedures and monitoring are often inadequate for following patients through EoP schemes; for example, many GPs and

leisure centres do not follow-up whether the patients take up the scheme, and do nothing if a patient does not. There is frequently a lack of feedback from leisure centres to GPs.

- Leisure centre instructing staff do not always know whether their group includes EoP patients, or how many of their groups are on EoP schemes, or whether these patients continue with exercise after the first programme. This occurs when the referrals are incorporated into an existing general programme.
- Evaluation is not always built into schemes and, when it does exist, not all parties appear to have read the evaluation reports.

Institutional provision

The provision of exercise and activities on EoP schemes is normally carried out through the local authority leisure services departments, although there are some exceptions. Leisure service departments of local authorities usually provide the exercise and activities programmes using their own leisure centre facilities, which are normally very good. They include a keep-fit type of provision for individuals or groups with or without equipment, games/sports activities in sport halls or outside, and swimming. Patients on EoP schemes are usually assessed by a fitness/health consultant before they embark on a recommended programme.

The main issues and problems are as follows.

- Normally a health and fitness officer conducts an assessment and gives advice on appropriate activities when a patient is first referred but, often, there is a lack of follow-up assessment and advice at the end of a programme or before undertaking a second programme or continuing exercising on their own. Follow-up assessment, advice and support are required because the referred patients are still at risk and because these actions may function as motivational tools.
- The problem of location of facilities, particularly in relation to distance from home, relates to travel distances and costs of getting to the facilities. Many people, including South Asian Muslim women, do not have their own transport and public transport is not always convenient or frequent. This research suggests that both South Asian Muslim women and their husbands are worried about women walking to the centres for safety reasons. This is of particular concern during dark winter evenings or when women have to cross a busy dual carriageway to gain access a sports centre.

- The key points of contact at a sports/leisure centre are the reception staff and the fitness consultant and instructors. Staff can often hinder customer access by their attitudes. Many South Asian Muslim women need interpreters and, if they are not accompanied by someone who speaks English, they are forced to rely on centre staff to provide a translation and to be patient and understanding. Centre staff cannot or do not always do this. There are often too few Asian staff employed at the centres, although this is not always for want of trying by leisure centre managers or local authorities. If Asian members of staff are employed they should be sympathetic to South Asian Muslim women's needs. Staff who are busy can often, inadvertently, give an impression of being unfriendly or unhelpful and thus deter South Asian Muslim women from accessing facilities in the future.
- The activity provision and, in particular, the need for women-only sessions may create problems. Centres need to provide a variety of opportunities at appropriate times and in appropriate contexts (that is, with women-only staff); this cannot always be done, often because of resource implications.

Resources

EoP schemes have often been set up on limited resources, sometimes through special grants for specific regional provision. Often, too, they are limited to a specific time-span, after which they have to be continued within agencies' own budgets. Sometimes there are insufficient resources for promotion. All down the line, resources such as staff time, finance and facility provision, are limited. More often than not, members of staff have to carry out other jobs as well as their EoP responsibilities. As a result there is a shortage of:

- finance for promoting EoP schemes
- provision for translations of information into different languages
- visual material, such as videos
- staff, especially link workers, dedicated EoP staff and extra instructors for facility provision, such as women-only sessions (although this has a time dimension as well as a financial one)
- subsidies for EoP provision after a first programme.

There are cost implications in providing EoP schemes and extra cost implications for making special provision for South Asian Muslim women. The NHS, health authority or primary care group

may decide that it is cost-effective to put resources into exercise schemes, as they are likely to have long-term benefits that will eventually mean cost savings. However, this is only likely to be the case if schemes are successful in assisting people to become long-term exercise adherers and to do this, schemes must have the resources. It is also likely to be expensive to provide the resources that will make them really effective. Private sponsorship from health/exercise-related commercial enterprises or local businesses may be possible but only if there is likely to be a payback. Private-public partnerships are currently popular as far as the Government is concerned but will be difficult to arrange for EoP schemes in which the returns for sponsors are low. The whole area of cost implications needs further examination by the relevant authorities.

Issues relating to South Asian Muslim women

The findings of this study support those found in the literature and suggest that there are significant barriers to South Asian Muslim women participating in exercise. Specifically, these are the culture of exercise, language, religion, age and socio-economic status.

Culture of exercise

South Asian Muslim women belong to communities that do not have a culture of exercise in the traditional Western sense of the word. As mentioned earlier, exercise was synonymous with the particularities of rural work and migration to urban environments has changed women's work. Physical activity has gone from being a subconscious activity to a conscious one. Women have generally increasing demands on their time, such as childcare, and many have limited disposable incomes of their own, which means that exercise and certain leisure activities have a low priority. Overall, there appears to be an increased awareness of the benefits of exercise among South Asian Muslim communities in the UK but it is necessary to continue informing the community of the potential benefits of physical activity to their overall well-being. Informing communities is only beneficial if some of the barriers to exercise are also overcome.

Language

It is well known that some South Asian Muslim women have literacy problems. In many cases they cannot write or speak English, and some are

unable to read or write their own language. This is not because the women are uneducated but rather that their education is an oral one. Consequently, South Asian Muslim women often feel uncomfortable at leisure centres where they may have difficulties with communication. They may be forced to rely on family or friends who speak English to act as interpreters. In the absence of such help, they would rather not encounter what is perceived as a hostile environment. Inclusive approaches to ethnic communities, as well as specifically towards South Asian Muslim women, have done much to accommodate the specificities of ethnic group needs and, in some areas, leisure centres and GPs' surgeries do provide written translations of publicity material. However, this is redundant for those with literacy problems. Few Asians are employed at key access points, such as at GP surgeries' and leisure centres' reception desks, or as fitness assessment and activity programme instructors, and this acts as a deterrent to overall participation.

Religion

Religion, in the form of Islam, is often regarded as a barrier to Muslim women's participation in the public sphere of the exercising agency. Islam does not prevent women from exercising but does advocate adherence to specific mores and codes of conduct between men and women. Such codes and mores are often interpreted, usually by Muslim men, as the control of women. Male–female dynamics within Muslim societies need to be understood if barriers to South Asian Muslim women exercising are to be genuinely overcome.

The main religious issue with regard to the male–female dynamic is the separation of the sexes and the maintenance of Islamic dress codes. Thus Muslim women should be able to exercise while continuing to cover their bodies and to carry out exercise in a strictly female environment. The extent to which a Muslim woman wishes to comply with Islamic codes of conduct will depend on the individual woman, her family environment and the community she comes from. Islam advocates modesty and, in practice, the outward manifestations of this may vary between Muslim women. Accordingly, some women may choose to keep their heads covered with a scarf, others may decide to exercise wearing the cultural dress of *shalwar-kameez*, and others may feel that track-suits are more comfortable. Whatever they decide, Muslim women choose to cover their bodies at all times, which may appear strange or out-of-place compared with Western culture, with its swimming costumes and leotards. In environments in

which such types of dress are common, Muslim women may often feel out of place and objectified because of their difference. In its mildest form, this can take the form stereotyping and prejudice, while the extreme form is racism. Both are directed at Muslim-ness and can have the effect of marginalising and excluding Muslim women.

Many Muslim women opt for women-only sessions for exercise. It is of vital importance that men do not supervise these women-only sessions. As with women generally, many Muslim women are also put off by communal shower areas and would prefer separate shower and changing cubicles.

There is considerable concern shown by members of families and communities. This may relate to safety issues for South Asian Muslim women who exercise and may, in some cases, prevent South Asian Muslim women from attending some centres. Families and communities feel happier with their daughters, sisters and wives exercising at localities near the home. As with all communities, transport difficulties hinder access to an exercising site. In many cases, families and friends do assist South Asian Muslim women but more organised transport would be advantageous. However, minority groups in Britain have traditionally fared worse in terms of services. The Runnymede Trust, in their 1997 report,⁶⁰ highlighted that, in addition to the conventional racism levelled at all minority groups, Muslims suffer the added dimension of religious discrimination and suggested that this both marginalises and excludes them.

Age

Many of the issues discussed above are related to the age of the women exercising. Although most Muslim women are governed by the Islamic codes of living, younger women born and brought up in Britain will be more familiar with Western ideas of exercise. Such concepts and the exercise environment are more alien to those who migrated to Britain from South Asia. Consequently, it is the older cohort of South Asian Muslim women who need to be targeted for exercise.

Socio-economic status

Migration to Britain and entrance into the lower echelons of economic society mean that many South Asian Muslim communities across Britain have been worst hit by economic decline. As discussed earlier, many such communities also live within economically deprived areas of cities. Consequently, a large number of South Asian Muslim women belong to the lower socio-economic groups and come from communities

in which unemployment is high. In many cases, more than one member of a household is forced to survive on state benefits. The problem is exacerbated when a household has a large number of dependants. In such circumstances, the cost of exercising becomes a real barrier. The cost of exercise is cumulative. In relation to dress and the unfamiliarity of gym dress codes, there is the cost of buying exercising dress and footwear; for many South Asian Muslim women this is the lowest household priority. Transport, in the form of a car, is not always available and access may be denied by the cost of transport. Public transport also decreases as an option because of its cost and, possibly, its availability. Furthermore, although EoP schemes are often free or low cost for the first programme, they are not usually free after this.

Continuing exercise is problematic because, even with leisure centre passes, follow-up programmes to EoP schemes entail charges that are not affordable by many of the households mentioned above. Thus the cumulative costs of exercising prove prohibitive for frequent and long-term adherence. Even after many of the barriers described earlier are overcome, it may often come down to finance and transport. This case can also be made for many of the white population.

Implications for practice

EoP promotion

1. Better and more direct communication is needed between agencies, the promoters of EoP schemes, general practices, and leisure centres/departments. This could be carried out through formal and informal meetings/contacts. Good communications should be the specific responsibility of an EoP officer, rather than leaving it to chance or to be everyone's or nobody's responsibility.
2. GPs should hold more information on EoP schemes, the value of physical activity for health, with the recommended guidelines for amounts and quality of exercise, and the exercise facilities and programmes available in the area. This should part of a holistic approach to health, so that it is seen as part of a health programme and not simply in isolation. Health promotion units could coordinate the information and see that information is given to GPs, and in an appropriate form for patients to read. The Department of Health could assist with advertising campaigns that are targeted at local communities through different mediums.

3. Community leaders could be invited on to steering/advisory/user committees and groups, and be involved in discussions with leisure centre staff/departments on activity provision and EoP. They could also be given information on physical activity for health, exercise facilities and programmes. Health promotion units could contact and inform.
4. There could be more promotion of health, EoP schemes and exercise facilities and programmes through videos, local radio and local and community press.
5. Community centres could be used more. For South Asian Muslim women, these are usually the first point of call on most issues. Links between the community, health promotion units, health promotion officers and the community centres could be strengthened. Health promotion departments, leisure centres and community centres could to inform South Asian Muslim women of the benefits of exercise. Stronger links with leisure centres would possibly provide more community-based exercise facilities and introduce South Asian Muslim women to the gym/activity environment through arranged visits.
6. An EoP officer could be appointed specifically to promote a scheme, with link-workers appointed to liaise with the community on health matters. Important information points would be community centres, mosques and madrasas. In addition, information could be available at family planning clinics and GPs' surgeries.
7. All promotion materials, including leaflets and audio-visual material, could be available in the appropriate languages.

Access to EoP schemes

8. There is a need to identify community facilities that may be suitable for exercise classes. More use could be made of community facilities that are 'on the doorstep', where South Asian Muslim women feel more 'at home' for activity sessions. Not all activities could be catered for at community centres and there may be problems, such as, insurance for accidents, showers and changing facilities. Non-equipment exercise, such as aerobics and organised walking could, however, be provided. Leisure centres could be encouraged to work more closely with community centres by providing instructors or carrying out promotional sessions. Such promotional sessions could include advice on the various possibilities for exercise dress.
9. More Asians could be employed at leisure centres, especially at reception and as instructors. As there are difficulties in recruiting staff

at present, positive action measures in recruitment could be considered. One long-term way of doing this would be for health promotion departments to liaise with community centres, schools, colleges and universities, to encourage more individuals from Asian communities to enter the leisure industry.

10. All staff, Asian and others, current or future, could be given special awareness training so that they are sympathetic to the needs and priorities of South Asian Muslim women.
11. Transport arrangements could be made to take South Asian Muslim women to facilities at zero or minimal cost.
12. There could be more women-only sessions throughout the week. These should be strictly women-only. The use of community facilities would help this.
13. Women-only sessions should, if possible, be accompanied by low-cost crèche facilities.
14. Ideally, EoP schemes should be free-of-charge for the first programme, with subsequent programmes subject to a minimal charge or free. The use of off-peak periods could perhaps facilitate this. Applications for special grants under various schemes could be made to support this.
15. There could be the provision for alternative types of programmes, such as walks to local places of interest, walks in the country, with transport provided at minimal cost.
16. South Asian Muslim women should be informed of the benefits of exercise and overall well-being through physical activity, with a view to South Asian Muslim women becoming independent and long-term exercisers. The use of support networks would assist in this.

Practice and procedures

17. GPs and leisure centre staff should monitor EoP patients and carry out follow-ups after the first programme. Adequate monitoring and evaluation procedures need to be established, if possible, right at the outset of schemes. The new National Framework provides the model.⁴²
18. It should be recognised that this is a long-term issue and that long-term programmes may be required.
19. It should be recognised that this is only one aspect of health and that a holistic approach is required.
20. The complexity of patterns of settlement, and that South Asian Muslim women are not a homogeneous group, should be recognised.
21. Differential expectations and cultures exist, and these should be taken into consideration in promotion and access (see recommendations 17 and 18 above).

22. All GPs and staff at leisure centres should be persuaded about the value of EoP schemes, so that practices and procedures could be put in place that are acceptable and clear to all.
23. There should be training for instructing staff relating to exercise provision, including the new EoP qualification (see the new National Framework for professional competences required⁴²).
24. Training should be available for all members of staff at leisure centres, including reception staff, and fitness assessors and instructors, in fully understanding racial issues, the requirements of South Asian Muslim women, dealing with people with language difficulties, and how to be sympathetic and friendly in dealing with the public.

Recommendations for research

Research on EoP schemes has not, so far, brought conclusive results. Trials are needed with large samples, clear criteria for groups and intervention programmes, and outcome measures at specific intervals up to 1 year. The pilot programme in this study indicated specific provisions for South Asian Muslim women and a further study should try to establish schemes for South Asian Muslim women on these lines and assess the value of such interventions. It seems appropriate that multi-methods and triangulation are used in further studies. Outcome measures should include physiological, psychological and behavioural measures, and there are indications of the type of measures in the pilot intervention programme from this study. When specific groups are included, such as South Asian Muslim women, then adaptation of the instruments needs to take place, as in this pilot study. However, there is a need to assess the reliability and validity of the specific adaptations, which was not possible in this study. There will also be a need to include qualitative methods in the form of in-depth interviews with EoP providers and recipients, and, possibly, participant observation.

It would be useful to investigate the cost implications of EoP schemes set against cost benefits, and also ways of funding schemes. There appears to be a need to investigate the best ways of promoting exercise programmes in different communities. Clearly EoP schemes are only one way. Such investigations should include how exercise can be a part of a holistic programme, which would clearly mean exercise being included in different types of health promotions.



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Appendix I

Questionnaires to GPs and leisure centres

Questionnaire to GPs



The University of Manchester

Project Title:
Promoting Physical Activity in South Asian Muslim Women through 'Exercise on Prescription' (EoP).

Project Funding:
NHS Research and Development – Health Technology Assessment Programme. Project No: 95/06/18

A. Questions about you

1. Name
2. Position

3. Name and address of your practice

 Tel: Fax:

4. Name of the EoP scheme(s) you are using for your patients

 Tel: Fax:

5. Name and address of the Health Authority in which the scheme(s) is situated?

6. Who else in your practice is involved in the management of the EoP scheme(s)?
 (please give details of key individuals, e.g. practice nurse)

Name/Title	Role
.....
.....
.....

B. Patterns of GP registration

7. How many patients are registered in total at your practice?

.....

8. What is the estimated percentage of ethnic minority patients registered at your practice?

.....

9. What is the estimated percentage of South Asian Muslim (Pakistani and Bangladeshi) women registered at your practice?

.....

C. Referral patterns

10. Do you keep a record of all your EoP referrals (EoP register)?

Yes

No
(Go to question 13)

Don't know
(Go to question 13)

11. Do your patients ask you for referrals on to EoP scheme(s)?

Often Sometimes

Never Don't know

12. What percentage of your total referrals are South Asian Muslim (Pakistani and Bangladeshi) women?

.....

13. Who refers patients to the EoP scheme(s)?

GP District nurse

Health visitor Leisure centre

Don't know

Other

(please specify)

14. Have you made any special provisions for South Asian Muslim (Pakistani and Bangladeshi) women on the EoP scheme(s)?

Yes

No
(Go to question 16)

15. What special provisions have you made within the EoP scheme(s) for South Asian Muslim (Pakistani and Bangladeshi) women?

- | | | | |
|--|--------------------------|-----------------------------|--------------------------|
| Women GPs | <input type="checkbox"/> | South Asian practice nurses | <input type="checkbox"/> |
| Promotional material in ethnic languages | <input type="checkbox"/> | Translators | <input type="checkbox"/> |
| Don't know | <input type="checkbox"/> | | |

Other
(please specify)

16. What happens, generally, to patients when they complete the EoP scheme(s) (for example, incentives, support and continued assessment)?

.....
.....

D. Monitoring and evaluation

17. Do you check whether the patients you refer take up the EoP scheme(s)?

- | | | | | | |
|-----|--------------------------|---------------------|--------------------------|---------------------|--------------------------|
| Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |
| | | (Go to question 19) | | (Go to question 19) | |

18. How do you check whether patients take up the scheme(s)? (please describe the monitoring procedure)

.....
.....
.....

19. What happens if a patient does not take up the EoP scheme(s)?

- | | | | |
|--|--------------------------|-----------------------------|--------------------------|
| Encouragement/counselling to take up the EoP scheme(s) | <input type="checkbox"/> | An alternative prescription | <input type="checkbox"/> |
| Nothing | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |

Other
(please specify)

20. Has the EoP scheme(s) been formally evaluated?

- | | | | |
|-----|--------------------------|---------------------|--------------------------|
| Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| | | (Go to question 25) | |

21. What forms of evaluation of the EoP scheme(s) have been employed?

(Please tick as many as apply)

Patient evaluation
by questionnaire

Exercise instructor's
questionnaire

Patient evaluation by
interview

Exercise instructor's
interview

GP questionnaire

GP interview

Don't know

Other
(please specify)

22. Has there been an evaluation report?

Yes
(please attach a copy)

No
(Go to question 23)

23. Who was responsible for carrying out the evaluation?

(please tick as many as apply)

Health Authority

General practice

Leisure Department

Leisure centre

Independent body Other
(please specify) (please specify)

24. Will an evaluation report be produced in the future?

Yes

No

25. Would you like to tell us about any other important features of your EoP scheme(s)?

.....
.....

26. Would you like us to keep you informed about our research?

Yes

No

Thank you very much for taking the time to complete the questionnaire.

**Please return this questionnaire in the self addressed envelope to
Nasreen Ali/Nazia Azam, Epidemiology and Health Sciences, Medical School,
The University of Manchester, Oxford Road, M13 9PT.**

**Fax: 0161 275 5219
Telephone: 0161 275 5218
Email: nasreen.ati@man.ac.uk**

Questionnaire to leisure centres

 <p>THE UNIVERSITY of MANCHESTER</p>	The University of Manchester	
Project Title: <i>Promoting Physical Activity in South Asian Muslim Women through 'Exercise on Prescription' (EoP).</i>		
Project Funding: <i>NHS Research and Development – Health Technology Assessment Programme. Project No: 95/06/18</i>		

A. Questions about you

1. Name

2. Position

3. Name and address of the leisure centre

.....
.....
.....
.....

Tel: Fax:

4. Name and address of the Health Authority in which the scheme is situated?

.....
.....
.....
.....
.....

Tel: Fax:

5. What is your role in the EoP scheme?

.....
.....
.....
.....
.....
.....

6. Who else is involved in the EoP scheme?

(please provide details of key individuals and organisations)

Individuals	Role	Organisations	Role
.....
.....
.....

B. Questions about the EoP scheme

7. Name of the EoP scheme

.....

8. When was this EoP scheme established?

(please give date)

.....

9. From where did the initiative for the EoP scheme come?

(please tick as many as apply)

GPs' practice/primary care	<input type="checkbox"/>	Health Authority	<input type="checkbox"/>
Leisure centre	<input type="checkbox"/>	Leisure Department	<input type="checkbox"/>
Community	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Other(s)			
(please specify)			

10. How is the EoP scheme funded?

(please tick as many as apply and indicate proportions of funding from each)

Health Authority funded	<input type="checkbox"/>	GP funded	<input type="checkbox"/>
Leisure Department funded	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Other(s)			
(please specify)			

11. How long is the EoP scheme to be funded for?

..... years months

12. How many general practices are linked with this scheme?

.....

13. How many leisure centres are taking part in this EoP scheme?

.....

14. Do you have a written description or protocol for your EoP procedures?

Yes No Don't know
 (please send a copy)

15. Is your EoP scheme being advertised by any of the following? (please tick all that apply)

Health promotion unit	<input type="checkbox"/>	Other leisure centres	<input type="checkbox"/>
Community centres	<input type="checkbox"/>	Leisure Department	<input type="checkbox"/>
GP(s)	<input type="checkbox"/>	Practice nurse	<input type="checkbox"/>
Don't know	<input type="checkbox"/>		

Other
 (please specify)

C. EoP referrals

16. How do patients get referred to you?

Practice letter	<input type="checkbox"/>	Patient presenting own prescription	<input type="checkbox"/>
Other	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
GP	<input type="checkbox"/>		

17. In the past 3 years (if applicable) how many patients were:

	Registered on the scheme	Completed the scheme
1998	<input type="text"/>	<input type="text"/>
1997	<input type="text"/>	<input type="text"/>
1996	<input type="text"/>	<input type="text"/>

18. Approximately what percentages of patients from ethnic minority communities have been referred to the scheme?

- | | | | |
|---------------|--------------------------|------------|--------------------------|
| Less than 5% | <input type="checkbox"/> | 5–10% | <input type="checkbox"/> |
| 11–20% | <input type="checkbox"/> | 21–30% | <input type="checkbox"/> |
| More than 30% | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |

19. What percentage of your total referrals are South Asian Muslim (Pakistani and Bangladeshi) women?
(please give approximate percentage)

- | | | | |
|--------------|--------------------------|------------|--------------------------|
| Less than 1% | <input type="checkbox"/> | 1–3% | <input type="checkbox"/> |
| 4–7% | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |

More
(please specify)

20. Provide (where possible) the numbers of South Asian Muslim (Pakistani and Bangladeshi) women currently on your programme?

.....

21. Have you made any special provisions within the scheme for South Asian Muslim (Pakistani and Bangladeshi) women?

- | | | | | | |
|-----|--------------------------|-------------------|--------------------------|-------------------|--------------------------|
| Yes | <input type="checkbox"/> | No | <input type="checkbox"/> | Don't know | <input type="checkbox"/> |
| | | (Go to Section D) | | (Go to Section D) | |

22. What special provisions have you made for South Asian Muslim women?
(tick as many as apply)

- | | | | |
|---|--------------------------|-------------------------|--------------------------|
| Women-only gyms | <input type="checkbox"/> | South Asian instructors | <input type="checkbox"/> |
| Translators | <input type="checkbox"/> | Transport service | <input type="checkbox"/> |
| Special counselling | <input type="checkbox"/> | Any specific activities | <input type="checkbox"/> |
| Promotional material/information about the scheme in ethnic languages | <input type="checkbox"/> | | |

Other
(please specify)

D. Questions about the exercise programme

23. What is the average number of exercise sessions offered to each patient per week on the EoP programme?

.....

24. On average, what is the duration of each programme?

..... months weeks

25. How much do patients pay, if anything, for the scheme?

.....

26. Is there any exercise activity(s) you do not offer in your EoP programme?

.....

27. Why has this exercise activity(s) been excluded from your EoP programme?

.....
.....
.....
.....
.....
.....

28. Do patients registered on the EoP scheme receive advice/counselling to help them choose the appropriate activity?

Yes

No

(Go to question 30)

29. How often do patients receive counselling/guidance during the programme?

.....

30. What happens to patients when they finish their prescribed EoP programme?

(for example, incentives, support and continued assessment. For how long does this go on?)

.....
.....
.....

31. Do you provide any feedback to the GP who referred an individual patient?

.....
.....
.....
.....

32. What format does this take?

(please tick as many as apply)

- Telephone call Special forms Written report
Via patient None at all

33. Is there a medical assessment of the patient after completing the exercise programme?

- Always Usually Never Don't know

34. Who carries out this assessment?

- GP Instructor Other Don't know

E. Monitoring and evaluation

35. Do you check if patients who are referred to the EoP scheme take it up?

- Yes No Don't know
(Go to question 38) (Go to question 38)

36. If the patient does take up the scheme, how is this carried out?

(please specify the monitoring procedure)

.....
.....
.....
.....
.....

37. What happens if the patient does not take up the EoP scheme?

Encouragement/counselling to take up the scheme?	<input type="checkbox"/>	An alternative prescription	<input type="checkbox"/>
Nothing	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
Other			
(please specify)			

38. Has the EoP scheme been formally evaluated?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
-----	--------------------------	----	--------------------------	------------	--------------------------

39. What forms of evaluation of the EoP scheme(s) have been employed? (tick as many as apply)

Patient evaluation by questionnaire	<input type="checkbox"/>	Exercise instructor questionnaire	<input type="checkbox"/>
Patient evaluation by interview	<input type="checkbox"/>	Exercise instructor interview	<input type="checkbox"/>
GP questionnaire	<input type="checkbox"/>	GP interview	<input type="checkbox"/>
Don't know	<input type="checkbox"/>		
Other			
(please specify)			

40. Has there been an evaluation report?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Don't know	<input type="checkbox"/>
(please attach a copy)		(Go to question 42)		(Go to question 42)	

41. Who was responsible for carrying out the report? (please tick as many as apply)

Health Authority	<input type="checkbox"/>	General practice	<input type="checkbox"/>
Leisure Department	<input type="checkbox"/>	Leisure centre	<input type="checkbox"/>
Don't know	<input type="checkbox"/>		
Independent body			
(please specify)			
Other			
(please specify)			

42. Will an evaluation report be produced in the future?

Yes No Don't know

43. Tell us about any other important features of your EoP schemes?

.....
.....
.....
.....
.....

44. Would you like us to keep you informed about our research?

Yes No

Thank you very much for taking the time to complete this questionnaire.

**Please return the questionnaire in the enclosed self-addressed envelope
Nasreen Ali/Nazia Azam, Epidemiology and Health Sciences, Medical School,
University of Manchester, Oxford Road, Manchester M13 9PT.**

Tel: (0161) 275 5218

Fax: (0161) 275 5219

Email: nasreen.ali@man.ac.uk

Appendix 2

Interview schedules for case studies

EoP providers/leisure centres

Interview schedule

What is the scheme called?

How long has the scheme been running?

Who set up the scheme?

(Prompt for background to setting-up of the scheme; barriers to setting up the scheme; funding, etc. Also, any tensions between health and leisure agendas.)

Why was the scheme set up?

How successful has the scheme been? Do you have a monitoring procedure?

Can you tell me a little more about this?

Are there any special provisions for South Asian Muslim women?

(Probe for information about transport, translators and women-only services.)

Do you hold promotional seminars to encourage South Asian Muslim women to partake in the schemes?

Do you send out promotional literature? (Probe for the language(s) in which this material is provided.)

What are some of the problems in recruiting South Asian Muslim women on to your exercise schemes?

How are you trying to improve the service for South Asian Muslim women?

Can you help us with contacts for:

- leisure centres running EoP schemes in your area?
- South Asian Muslim women who take up the scheme?
- members of the community who run exercise programmes outside the formal EoP system?

South Asian Muslim women

Interview introduction

Before we begin, can you confirm that the aims of the study have been explained to you and that you are willing to participate?

Any information that you give us will be completely confidential and no one will have access to the interview manuscript apart from members of our research team. In the final research report, the information that you give us will be presented in such a way that no one could identify you. Your participation in this study is completely anonymous. If at any stage of the interview you decide that you do not want to participate further, you are free to say so. You need to agree that you are happy for this interview to be recorded.

Are there any questions that you want to ask about the study before we begin the interview?

Before we begin, would you please confirm that the aims of the study have been explained to you and that you are willing to participate?

Interview schedule

Biographical details

Age?

Occupation?

Country of birth?

Length of residence in the UK?

Access to information

From where did you get details about exercise? (Prompt for information from GP, community centre or other provider, such as health visitor, hakim, family planning clinic and community worker).

Do you talk to your GP about exercise? (Prompt – Would it be easier to talk to a woman GP about health and exercise?)

Do you have any language problems when discussing health and exercise with your GP?

Does your GP provide any translators?

What would make it easier for you to discuss health and exercise?

Health

What is your health like at present?
(Prompt for general well-being, etc.)

What are the benefits of exercise?

What sort of physical activity do you currently undertake?

What sort of physical activity would you like to do in the future?

What activities/events do you prefer doing?
(Prompt for information on group activities – less isolated, less stressful, networking, making friends – or individual programmes.)

How often do you exercise?

Facilities

What type of activities do you undertake?
(Prompt for activities such as walking, etc.)

Do you go to a leisure centre to exercise?
(Prompt for alternatives such as community centres or local women's health initiatives.)

How often do you visit a leisure centre?
(Prompt for number of times per week and times during the day.)

How long do you spend at the leisure centre?
(Prompt for number of hours spent on EoP programme.)

Why do you go to the leisure centre?
(Prompt for the social side of going (i.e. making friends and getting out of the house) and the health side (i.e. getting fit and losing weight.))

What sort of local support has been provided for South Asian Muslim women?
(Prompt for information on leisure centre's, community centre's or local women's health initiatives.)

Do you face any cultural barriers to undertaking exercise?
(Prompt for information on opinions of community, family and friends.)

Do you face any racial barriers to undertaking exercise?

Do you face any religious barriers to exercising?
(Prompt for opinions on the impact of Islam and of being Muslim on exercising.)

Do you face any other type of barrier to exercising?
(Prompt for information on transport, child-care, etc.)

What recommendations would you make to improve exercise EoP services for South Asian Muslim women?

What improvements would you like to see made to facilities for South Asian Muslim women?
(Prompt for crèche facilities, women-only gyms, women instructors.)

About the EoP scheme

Why were you referred on to the scheme?

What exercise programme are you taking part in?

Why did you choose this programme?
(Prompt for information on whether the programme was specially developed for the patient. Who did this?)

What do you like about the EoP scheme?

What do you dislike about the scheme?

What do your family and friends think about you taking part in the EoP scheme?

What have been your most significant exercise behavioural changes?

What other changes has it made to your general well-being?
(Prompt for psychological benefits, energy levels, sleep patterns, etc.)

With whom, if anyone, do you exercise?

What have been the overall benefits of the EoP programme?

What have been the overall disadvantages of the EoP programme?

Will you continue to exercise after the EoP programme is over?

Where will you do this?

EoP providers/GPs

Interview schedule

Can you tell me about the EoP scheme?
(Prompt for the referral procedure.)

What types of patients get referred on to the scheme?

(Prompt for types of ailments.)

Do you refer many South Asian Muslim women on to the EoP scheme?

Do you make any special provision with the practice for South Asian Muslim women?
(Prompt for information on translators, link workers, promotion information, etc.)

How do you think services for South Asian Muslim women could be improved?

How important do you consider EoP to be?

What are the benefits of the EoP scheme?

What are the problems related to referring patients on to the EoP scheme?

Appendix 3

Questionnaire for the pilot intervention programme

Self-efficacy test

Below are a number of statements about exercise and situations. Please read each statement carefully and see how strongly you agree or disagree with each statement.

Please tick the box that best describes the level of your exercise in the last 3 months

- I do exercise currently but not regularly ()
- I do exercise regularly but have only started doing so in the last 3 months ()
- I exercise regularly and have done so for more than 3 months ()

Below are statements relating to exercising in various situations. Please tick one box for each statement.

	Strongly disagree				Strongly agree
	1	2	3	4	5
I am confident I can participate in regular exercise when:					
I am tired	()	()	()	()	()
I am in a bad mood	()	()	()	()	()
I feel I don't have time	()	()	()	()	()
I am on vacation	()	()	()	()	()
It is raining or snowing	()	()	()	()	()
I can get time to go to the gym	()	()	()	()	()
When someone looks after the children	()	()	()	()	()
I go in a group	()	()	()	()	()

Below are reasons why people do not exercise. Please tick the answer that best describes you.

	Strongly disagree				Strongly agree
	1	2	3	4	5
I just can't find the time to exercise properly	()	()	()	()	()
My children and family take up my time	()	()	()	()	()
I don't really like exercising	()	()	()	()	()
I can't find time to exercise inside the home	()	()	()	()	()
I would exercise more if there were more support from exercise group leaders	()	()	()	()	()
I would exercise more if there were women-only sessions	()	()	()	()	()
I would exercise more if there were a women-only gym	()	()	()	()	()
I would exercise more if I received more support and encouragement from my family	()	()	()	()	()
I would exercise more if exercise people could speak my language and explain things to me	()	()	()	()	()
I find exercise tiring and hard work	()	()	()	()	()
I worry about how I look when I exercise	()	()	()	()	()
I would exercise more if the dress were more appropriate to Islam	()	()	()	()	()
It is not in our culture to exercise	()	()	()	()	()
I feel foolish when I exercise	()	()	()	()	()
I would exercise if facilities were nearby	()	()	()	()	()

I would exercise more if there was transport to and from classes () () () () ()

I would exercise more in summer when it is still light () () () () ()

My work doesn't allow me time to exercise regularly () () () () ()

Below are some statements on attitudes to exercise. Please read each statement and select one answer.

I would feel more confident if I exercised regularly () () () () ()

I would feel less stressed if I exercised more () () () () ()

I would have less time for family, friends and my children if I exercised regularly () () () () ()

It is difficult to find an exercise activity I enjoy that is in an all-female environment () () () () ()

I would feel more comfortable with my body if I exercised regularly () () () () ()

I feel uncomfortable when I exercise because men are around and can see me () () () () ()

I feel uncomfortable when I exercise because I get out of breath easily and my heart beats very fast () () () () ()

I am too exhausted to exercise at the end of the day () () () () ()

I feel better mentally when I exercise () () () () ()

Thank you for your help.

Appendix 4

Interview schedules for the pilot intervention programme

South Asian Muslim women

Semi-structured interview schedule

Biographical details

Age?

Occupation?

Country of birth?

Length of residence in the UK?

Marital status?

Before starting the exercise programme

1. How do you see your present state of physical and mental health?
2. What exercise activities do you do at the moment?
3. What are your favourite exercise activities?
4. Why do you exercise? (benefits of it, i.e. psychological, physical, getting out of the house, making friends, etc.)
5. How often do you exercise in a week?
6. What are the main barriers to exercise for you? (i.e. religion, culture, language, childcare, family, etc.)
7. What do you hope to get out of this exercise programme?
8. If you had to pay for sessions would you be prepared to do so? What amount would you be willing to pay?
9. Can I talk to you again when you have finished this exercise programme?

After exercise programme is finished

1. What have you got out of this exercise programme?
2. What did you expect to get out of this exercise programme?
3. What have your most significant behavioural changes been since you started this exercise programme? (psychological and physical, sleeping patterns, tiredness, confidence, etc.)
4. While on the programme, did you visit your GP?
5. Will you carry on exercising now the programme is finished? (Where and what?)
6. Would you recommend this programme to others?

EoP scheme providers: interview schedule

1. What is this exercise scheme/project called?
2. Please confirm your role in this exercise scheme/project.
3. How long has this scheme/project been operational?
4. Who was responsible for setting up this scheme/project?
5. What was the rationale behind this scheme/project? (Probe into monitoring procedure and screening of particular patients?)
6. What exercise activities are included in the scheme/project?
7. What special provisions have you made for South Asian Muslim women?
8. How are people referred to the scheme? (GP referral, recruitment by word of mouth, etc.)
9. What kinds of people are taking up this scheme/project?
10. What kind of promotional strategy did you employ?
11. Do you currently hold promotional seminars to encourage South Asian Muslim women to take part in the scheme/project?

12. Do you send out promotional literature?
13. Do you make use of any community groups? Please tell me more about this.
14. What have been the problems of recruiting South Asian Muslim women on to the scheme/project?
15. How successful has the progress of the scheme/project been so far? Please tell me more about this.
16. Is there anything else you wish to add?

GPs: interview schedule

1. Are you aware of the 'Exercise to Health' scheme currently under way in this area?
2. Do you know if any of your patients are involved in this scheme? (Probe into particular ailments that patients may have.)
3. Do you consider that this scheme is beneficial to the practice? (Reasons why?)
4. What do you think patients will get out of this exercise programme/scheme?
5. Do you see your patients once the exercise programme/scheme has been completed?
6. How useful is this scheme/project? (Probe into numbers of patients referred and numbers staying on the scheme and 'drop-outs'.)
7. Are there any legal and/or financial implications for not having a direct involvement in the scheme/project?
8. Do you have any concerns about aspects of the programme? (Prompt for issues of health and safety, staff training and project monitoring.)
9. Is there anything else you wish to add?



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Feedback

The HTA Programme and the authors would like to know your views about this report.

The Correspondence Page on the HTA website (<http://www.nchta.org>) is a convenient way to publish your comments. If you prefer, you can send your comments to the address below, telling us whether you would like us to transfer them to the website.

We look forward to hearing from you.

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