the Mental Health Foundation

UP AND RUNNING?

Exercise therapy and the treatment of mild or moderate depression in primary care

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i) Foreword

"The time is now right for action. At the start of the twenty-first century England needs a new approach to the health of the public, reflecting the rapid and radical transformation of English society in the latter half of the twentieth century, responding to the needs and wishes of its citizens as individuals and harnessing the new opportunities open to it. It needs policies and approaches which reflect the realities of people's lives today."

These are among the opening words of *Choosing Health*, the Government's 2004 White Paper on public health, produced while the Mental Health Foundation was preparing this report. They are words and thoughts with which we can all agree. We must be ambitious in our pursuit of better policies and approaches, for all citizens. This must include people who experience and seek treatment for mental health problems. For too long, while choice and holistic approaches have been popular watchwords and goals across our healthcare system, people who seek help for depression have had little or no choice. Often they have been able to choose only between lengthy waiting lists or medication with sometimes intolerable side effects. The burden this has placed on primary care staff, and especially on GPs, is immense.

But there are well-evidenced treatment options that could be made widely available with some thought, effort and investment. The most practical of these, and the one most congruent with the Government's own public health plans, is exercise referral.

Public health in this country has been skewed towards the physical aspects of health for 150 years. The NHS has been similarly skewed since its creation. The time has come for people with depression to be treated equally and to be offered a full range of evidence-based treatments. This is especially true of treatments such as exercise referral, which is inexpensive, effective, and has coincidental benefits.

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Chief Executive
The Mental Health Foundation

ii) Acknowledgements

This report was written by Ed Halliwell, Research Consultant to the Mental Health Foundation. It was commissioned and edited by Celia Richardson, Director of Communications, with policy and research direction from Dr Andrew McCulloch, Chief Executive, and Iain Ryrie, Assistant Director of Research.

The Mental Health Foundation would like to acknowledge the following for their contributions to the production of this report:

> Murdo Wallace, Chairman, The Wright Foundation

> Andrew Power, Physical Activities Co-Ordinator and Project Manager, South Tyneside Exercise Referral Scheme

> Sean Cahill, Development Manager, and Ian Ashworth, Development Officer, EXCEL To Health exercise referral scheme, Sefton, Merseyside

> Gary King, Research Director, and Judith Ryall, Senior Research Executive, NOP World Health

> Yvonne Trchalik, Green Gym Development Manager, and Helen Jones, East Brighton Green Gym Officer, British Trust For Conservation Volunteers

> Phil Kelly, Lichfield District Council

> Sarah Van Hoof, Mental Health Course Director, YMCAfit

> Dr Adrian Taylor, Reader In Health And Exercise Psychology, University of Exeter

> Professor Irving Kirsch, Chair Of Psychology, University of Plymouth

> Annie Holden, Active Lifestyles Manager, and Mike Galvin, Active Lifestyles Monitoring And Adherence Officer, Bromley MyTime

> Fiona Hamilton, Health Promotion Officer (Physical Activity), Greater Glasgow NHS Board

> Toby Williamson, Head of Policy and Graeme Sandell, Assistant Director of Service Practice Development, the Mental Health Foundation

We would especially like to thank all those who gave their time to be interviewed for this report about their experiences of exercise in the treatment of depression. Some names have been changed.

iii) Executive summary

Introduction

There is a substantial body of evidence to show that physical exercise is an effective treatment for people with mild or moderate depression. This report was commissioned in the light of this evidence, and in the context of new research by the Mental Health Foundation, which reveals how GPs respond to depression, and their attitudes towards those responses. It outlines the benefits of using exercise therapy in cases of mild or moderate depression, the obstacles to its more widespread use, and how these obstacles might be overcome. The aim of *Up And Running?* is to promote exercise therapy for mild or moderate depression as a realistic and readily available tool for GPs, and a genuine option that patients can both understand and choose for themselves.

Background

Over the last 12 years, the number of prescriptions written for antidepressants in England has almost tripled, from 9.9 million in 1992, to 27.7 million in 2003. Over the same time period the cost of antidepressant prescriptions has increased by an even greater degree, from £18.1 million to £395.2 million, a rise of more than 2000%. These increases have coincided with the introduction of a new class of antidepressant drugs known as SSRIs (Selective Serotonin Re-uptake Inhibitors).

While SSRIs are not as toxic in overdose as earlier antidepressants, their effectiveness and safety are increasingly being challenged. Reports of unpleasant side and withdrawal effects have been treated with growing concern in the media and by regulatory bodies. While these drugs may be very effective for some people, the more serious side effects associated with SSRIs, such as increased incidence of self-harm and suicide, are particularly worrying. Combined with low treatment completion rates and relatively high costs, the value of using these antidepressants as a first-line treatment for mild or moderate depression is uncertain.

GPs know the problems associated with antidepressants; their clinical guidelines now say that antidepressants should not be used as a first-line treatment for mild depression, and they are well-versed in the merits of offering patients choice. But every day they see people who are seeking help, and there seem to be few other choices available. This is reflected in our research, which reveals a significant difference between GPs' beliefs about how mild or moderate depression ought to be treated, and how they actually respond to it in practice. For example, 78% of GPs have prescribed an antidepressant despite believing that an alternative approach might have been more appropriate. 66% of these have done so because a suitable alternative was not available.

While a number of voices are now challenging antidepressant effectiveness and safety, very few are offering well-evidenced, practical alternatives. The most common alternative approach – psychotherapy and counselling – can be expensive, and there are frequently long waiting lists. There is immense pressure on primary care staff, and especially on GPs, to manage the load created by depression. This means that information about alternative treatment options urgently needs to be disseminated.

Exercise therapy – a first-line treatment option

The benefits to physical health (including lower rates of coronary heart disease, stroke, high blood pressure, some cancers, type 2 diabetes, osteoporosis and obesity) of regular exercise are well understood and accepted. But the benefits to mental health (reduced anxiety, decreased depression, enhanced mood, improved cognitive functioning and self-worth) have been less widely reported and are less well-understood and accepted.

Research shows that a supervised programme of exercise can be as effective as antidepressants in treating mild or moderate depression. In view of this, there are strong reasons for promoting exercise therapy as a first-line treatment. Exercise has far fewer negative side effects, and indeed it has a number of coincidental benefits; it can be used to treat patients who have a mix of physical and mental health problems; it is a sustainable recovery choice; it promotes social inclusion; and it is a popular treatment. Although it is commonly believed that people with depression will not want or be able to exercise, treatment completion rates may often be much higher than for medication. It is also less expensive to deliver than many alternatives, and the mechanisms for delivering it in a primary care context already exist across the UK. These are known as exercise referral schemes.

Official guidance now reflects the weight of evidence in favour of exercise as a response to mild or moderate depression. In April 2004, a report by the Chief Medical Officer on the impact of physical activity and its relationship to health stated that: 'Physical activity is effective in the treatment of clinical depression and can be as successful as psychotherapy or medication, particularly in the longer term'. In December 2004 the National Institute for Clinical Excellence recommended in its guidelines for treating depression in primary and secondary care that: 'Patients of all ages should be advised of the benefits of following a structured and supervised exercise programme of typically up to three sessions per week of moderate duration (45 minutes to one hour) for between 10 and 12 weeks'.

Against this backdrop, *Up And Running?* was commissioned to examine available treatments for mild and moderate depression in primary care. Specifically, the report focuses on antidepressant and exercise referral prescriptions, their use and availability, and how general practitioners and their patients feel about them. We also report on the form and structure of exercise referral schemes across the UK, and the experiences of those who use them.

We have found that, despite having a substantial evidence base, clear clinical guidelines, coincidental benefits including better physical health, social inclusion, and increased patient choice, exercise therapy is very unlikely to be offered to patients who present to their GP with depression. Although GPs are lukewarm in their attitude to antidepressants, and feel they need more access to alternatives, the promotion of exercise therapy to patients with mild or moderate depression barely features in their thinking.

5% of the 200 GPs surveyed for this report use exercise referral as one of their three most common treatment responses to mild or moderate depression, compared with 92% who use antidepressants as one of their three most common treatment responses.

Why isn't exercise referral offered by GPs?

According to our research, only 42% of GPs have (or know they have) access to an exercise referral scheme. None of these said they used it very frequently as a referral option for patients with mild or moderate depression, while 15% said they used it fairly frequently.

Of the GPs who use their exercise referral scheme 'not very frequently' or 'not at all' for patients with mild or moderate depression, 43% say this is because they aren't convinced it is an effective treatment response. This suggests there is a considerable information and knowledge gap.

Research carried out into non-pharmacological, non-psychotherapeutic ways of treating depression may well fail to reach GPs or other healthcare decision-makers. Exercise referral schemes, for example, will not be able to match the marketing or staffing power of pharmaceutical companies when it comes to communicating and investing in relationships with GPs. This is especially important given the nature of depression. Research on the placebo effect of antidepressants suggests that belief in the effectiveness of a treatment may well form an important part of the success of that treatment.

Major changes in prescribing behaviour will not happen overnight because of a change in clinical guidelines. This is why the Mental Health Foundation is embarking on a campaign to promote exercise referral. Our aim is to remove the main obstacle to the use of exercise therapy as a first-line treatment for mild or moderate depression in primary care – the failure of information to reach those who may be able to use it. *Up and Running?* marks the beginning of this campaign.

iv) Methods

A range of research methods were used to compile the data for this report, including:

- A review of existing literature on antidepressant medications and their use, the treatment of depression in primary care, GP attitudes towards exercise, and the value of exercise therapy as a treatment response for depression.
- A self-completed survey by a nationally representative, quota-controlled sample of 200 NHS GPs.
- Site visits to three exercise therapy schemes and interviews with key stakeholders including local GPs, scheme co-ordinators, referral officers and participants.
- Interviews with people who have, on their own initiative, incorporated exercise into their lives as a strategy for managing depression.
- Interviews with prominent academics researching the effectiveness of antidepressant medications and/or exercise for mental health problems.
- Interviews with representatives of two exercise referral training organisations.

v) Key findings

Antidepressants

- GPs are lukewarm in their attitude to antidepressants. 71% believe them to be 'quite effective' but 57% say they are over-prescribed.
- 55% of GPs prescribe antidepressants as their first treatment response for mild or moderate depression, although only 35% believe antidepressant medication is the most effective intervention for these conditions.
- 42% of GPs feel that most patients given antidepressants would be as likely to get better if they were unknowingly prescribed a placebo.
- 78% of GPs have prescribed an antidepressant in the last three years despite believing that an alternative treatment might have been more appropriate. 66% have done so because a suitable alternative was not available, 62% because there was a waiting list for the suitable alternative, and 33% because the patient requested a prescription for an antidepressant.
- GP attitudes may be changing – recently qualified GPs are less likely than those who qualified 10 years ago to turn to antidepressants as their first treatment response.
- 60% of GPs would prescribe antidepressants less frequently if other treatment options were more available to them.

Exercise therapy

- Very few patients are offered the choice of exercise therapy as a treatment response for mild or moderate depression – only 5% of GPs use it as one of their three most common treatment responses, compared to 92% of GPs who use antidepressants as one of their most common treatment responses.
- It is estimated that there are now 1,300 exercise referral schemes across the UK.
- Less than half of GPs (42%) report having access to exercise referral schemes.
- Only 15% of GPs who say they have access to exercise referral schemes use them 'very frequently' or 'frequently' for patients with mild or moderate depression.
- Less than half of GPs (41%) believe exercise therapy to be a 'very effective' or 'quite effective' treatment for mild or moderate depression.
- There is considerable variation between exercise referral schemes including their size, capacity, levels of promotion to healthcare professionals, types of activity offered, costs to clients and levels of support offered.
- Since publication of the National Quality Assurance Framework for exercise referral systems, new and existing schemes have a clear, consistent and well-structured set of good practice guidelines.

vi) Recommendations

The UK government should invest £20 million in developing and promoting exercise referral as a treatment for mild or moderate depression. This represents approximately 5% of the annual spend on antidepressant prescriptions in England.
Stakeholders: Department of Health, exercise referral schemes, primary care trusts, training bodies.

The availability and uptake of high-quality exercise referral schemes must be increased across the UK in line with the government's public health white paper.
Stakeholders: Department of Health, primary care trusts, leisure services, local authorities, private gyms.

GPs with access to exercise referral schemes should offer all patients presenting with mild or moderate depression the opportunity for referral to that scheme as part of their treatment plan.
Stakeholders: GPs.

All exercise referral scheme staff should receive core training specific to dealing with clients who have depression.
Stakeholders: Exercise referral schemes, primary care trusts, exercise referral training organisations.

Commissioners must ensure that exercise referral schemes are effectively resourced to take referrals for depression, and that associated targets are reflected in contract specifications.
Stakeholders: Primary care trusts.

Mental health trusts and local authorities must ensure their health and social care staff are knowledgeable about exercise referral schemes and promote care pathways.
Stakeholders: Mental health trusts, local authorities.

The Mental Health Foundation should mount a sustained campaign to raise awareness of the benefits of exercise therapy for patients with mild or moderate depression, and should seek Department of Health funding and support as a campaign partner.
Stakeholders: Mental Health Foundation, Department of Health.

Mental health and sports organisations should work to raise awareness of the benefits of exercise therapy in treating mild or moderate depression.
Stakeholders: Organisations including Mind, Depression Alliance, the National Institute for Mental Health in England, and Primary Care Mental Health and Education.

The Mental Health Foundation should seek partners and funding for a pilot scheme of exercise referral 'reps' to liaise between PCTs, GPs and referral schemes, promoting knowledge and uptake of exercise referral for patients with mild or moderate depression.
Stakeholders: Mental Health Foundation.

Exercise referral schemes should be as proactive as possible in promoting their schemes to local GPs, especially their ability to take referrals for depression. They should also publish results of their quality audits and make these available to the primary care sector.
Stakeholders: Exercise referral schemes.

Exercise referral schemes should collect data on referrals for depression in their local area, reporting annually to primary care trusts. In turn, trusts should use this data to target promotion activity.
Stakeholders: Primary care trusts, exercise referral schemes.

A systematic review of the effectiveness of exercise referral schemes in treating depression should be commissioned and widely distributed in full and in formats suitable for all key stakeholders.
Stakeholders: Cochrane collaboration, Department of Health, academic research community.

The Department of Health should make research funds available to support the evaluation of both current activity and anticipated practice developments.
Stakeholders: Department of Health, NHS R&D funders, academic research communities.

vii) Significant statistics

GPs' treatment choices for mild or moderate depression

- 5% of GPs use a supervised programme of exercise as one of their **three most common** treatment responses to mild or moderate depression, compared to 92% who use antidepressants as one of their three most common responses.
- 55% of GPs prescribe antidepressants as their **first** treatment response for mild or moderate depression.
- 32% of GPs refer to some form of psychotherapy or counselling as their **first** treatment response.
- Less than 1% of GPs refer to a supervised programme of exercise as their **first** treatment response.

GPs' belief in the effectiveness of treatment choices

- 35% of GPs believe antidepressant medication is the most effective strategy for patients with mild or moderate depression, even though 55% prescribe it as their first treatment option.
- 55% of GPs believe some form of psychotherapy or counselling is the most effective strategy.
- Less than 1% of GPs believe a supervised programme of exercise is the most effective strategy.
- 11% believe a supervised programme of exercise is one of the three most effective strategies.

GPs and antidepressants

- 57% of GPs believe antidepressants are prescribed too often.
- 23% of GPs believe antidepressants are 'very effective'. 71% of GPs think they are 'quite effective'.
- 40% of GPs agree that antidepressants are not as effective as the public thinks they are.
- 42% of GPs agree that most patients given antidepressants would be as likely to get better if they were unknowingly prescribed a placebo.
- 61% of GPs believe that antidepressants are not generally effective unless used as part of a wider, individually-tailored care package.
- 78% of GPs have prescribed an antidepressant in the last three years despite believing that an alternative treatment might have been more appropriate. Of these, 66% have done so because a suitable alternative was not available, 62% because there was a waiting list for the suitable alternative, and 33% because the patient requested a prescription for an antidepressant.

> 60% of GPs would prescribe antidepressants less frequently if other treatment options were more available to them.

GPs and exercise

> 37% of GPs believe that exercise is 'quite effective' as a treatment for mild to moderate depression. However, only 4% believe it is 'very effective'.

> 42% of GPs say they have access to an exercise referral scheme for their patients. 7% don't know whether they have or not.

> 15% of GPs who have access to an exercise referral scheme use it 'fairly frequently' for patients with mild or moderate depression. 54% use it 'not very frequently' and 31% use it 'not at all'. None reported using a scheme 'very frequently' for depressed patients.

> Of those GPs who do not or would not use an exercise referral scheme 'very frequently' or 'fairly frequently', 43% aren't convinced that exercise is an effective treatment for mild or moderate depression, 39% say their patients wouldn't be willing or able to participate and 14% say it wouldn't occur to them to use it.

What GPs would do if they became depressed

> 40% of GPs would try counselling/psychotherapy first if they became depressed, 38% would try antidepressants first, and 11% would try a programme of exercise first.

> 42% of GPs would try exercise as one of their top three strategies if they became depressed (despite only 5% prescribing it to their patients as one of their top three responses).

1.0 Introduction

1.1 The incidence of depression in primary care

At some point in their lives, one in four women and one in ten men in the UK will experience a period of depression serious enough to require treatment. When this occurs, they are most likely to seek and receive that treatment from their GP – around three-quarters of those who present with depression will continue to be treated within a primary care context.[1]

This places a substantial burden on GPs – up to 30% of consultations relate to a mental health problem[2], and depression is the most common mental disorder found in community settings.[3] Figures suggest that in recent years, more people have been seeking help for the condition from their GP – between 1994 and 1998, for example, the number of consultations for depression more than doubled, from 4 million to 9 million.[4]

1.2 The treatment of depression in primary care: antidepressant use

Since the mid-twentieth century, the main treatment for depression in primary care has been the prescription of antidepressant medication. Until the 1990s, this would usually have been in the form of Tricyclic or Monoamine Oxidase Inhibitor (MAOI) antidepressants – although the prevalence of unpleasant side effects often discouraged patients from taking medication, while doctors were sometimes wary of prescribing the drugs due to the high risk of mortality in overdose.

In the late 1980s, a new class of antidepressant – the Selective Serotonin Re-uptake Inhibitors (SSRIs) – was introduced. These drugs were safer in overdose and believed to elicit less problematic side effects than the older antidepressants. They also received widespread media attention, following clinical reports that they could induce dramatic improvements in some people.[5]

The introduction of SSRIs coincided with a rapid increase in the number and cost of antidepressant prescriptions. In 1992, 9.9 million prescriptions for antidepressants were dispensed in the community in England, at a cost of £18.1million.[6] By 2003, the number of prescriptions had risen to 27.7 million, at a cost of £395.2million.[7] This represents a 180% rise in the number of prescriptions and a 2083% rise in cost over 12 years.

1.3 Concerns regarding antidepressant use: effectiveness

In recent years, some researchers have begun to question the effectiveness of medications, especially for mild or moderate depression. Analysis of trial data has shown that antidepressants often fail to outperform placebo, and when they do, the difference in that performance is small.[8] (see Antidepressants vs placebo). The placebo response appears to be greatest in cases of less severe depression[9] and studies have shown that it is this group of patients that are most likely to be treated in primary care.[10] According to the Consumers Association: 'Most depression that GPs treat is below, or only just reaches, the minimum diagnostic criteria for major depression… (these patients) are often described more loosely as having mild depression.'[11]

There is no question that many people experiencing depression improve after taking medication. However, the fact that antidepressants' success is largely duplicated by placebo in mild or moderate depression suggests the effect may be mostly due to non-pharmacological mechanisms – a response, perhaps, to trust in the doctor's opinion, relief at the provision of care and a plan of action, or the instillation of hope via prescription of a class of drug that has been promoted as, and is widely believed to be, effective. If this is the case, then we can legitimately ask whether pharmacology is the most effective, enduring, cost-effective, direct and honest way to deliver such an effect. This seems especially relevant in a primary care context, where most patients are likely to come under the diagnostic criteria of mild or moderate depression, for whom the placebo effect is strongest.

Antidepressants vs placebo

In 2002, Professor Irving Kirsch and colleagues published an analysis of 47 randomised placebo-controlled short-term efficacy trials data held by the US Food and Drug Administration (FDA). The data referred to the six most commonly prescribed antidepressants approved between 1987 and 1999 (all of them SSRIs), and which had been supplied by the manufacturers in order to obtain licences for the drugs. The analysis showed that:

- In more than half the trials submitted to the FDA, the antidepressant being tested failed to outperform placebo.
- On average, placebo duplicated 82% of the active drug response.
- The mean difference between effect of antidepressant and effect of placebo was approximately two points on the 17 and 21 point Hamilton scale, a difference which the researchers described as 'not clinically significant'.[12]

These findings are not inconsistent with other studies[13] – indeed, the most positive trial results tend to show that the active drug elicits improvement in only a third more patients than placebo.[14] Of course, placebo treatment is not the same as no treatment – but the fact that the antidepressants performed only 18% better than placebo in these trials suggests that much of their success may not be due to the active ingredients. There are also methodological problems with some of the data produced in support of antidepressant use, which may lead to results biased towards a positive drug performance. Pharmaceutical companies fund 70% of trials, and these trials have been found to be four times more likely to show favourable results for the company's product than studies funded by other sources.[15] The studies analysed by Kirsch et al were all based on pharmaceutical industry data, and it has been suggested that even the 18% advantage of antidepressant over placebo is 'quite possibly a methodological artifact'.[16]

1.4 Concerns regarding antidepressants: side effects

The side effects and withdrawal symptoms associated with the newer antidepressants have also come under scrutiny. Although the drugs are considered more tolerable than Tricyclic and MAOI antidepressants, the 'adverse events' associated with them can still be unpleasant. For example, according to the Summary Of Product Characteristics (SPC)[17] published by Wyeth Pharmaceuticals about its antidepressant Efexor (Venlafaxine) 'the most commonly observed adverse events associated with the use of Venlafaxine in clinical trials...were nausea, insomnia, dry mouth, somnolence, dizziness, constipation, sweating, nervousness, asthenia, and abnormal ejaculation/orgasm'. In a list compiled by the British Medicines Control Agency of the top 20 drugs for which withdrawal problems were reported under the UK yellow card scheme, five of the top six were SSRI antidepressants.[18] Unpleasant symptoms often result in patients deciding not to continue with medication. In a 1999 UK study of 16,204 patients who were prescribed antidepressants by their doctor, only 33% completed 'an adequate period of treatment'.[19]

There have also been more serious side effects associated with SSRIs – that is, increased incidence of self-harm and suicide. A 2000 study of patients attending one Derbyshire clinic found a positive relationship between SSRIs and all forms of deliberate self-harm[20], while Healy and Whitaker have noted that meta-analyses of SSRI trials reveal an excess of suicidal acts by patients on active treatments compared to placebo.[21] In December 2003, the Medicines And Healthcare Products Regulatory Agency contraindicated the use of all SSRI antidepressants (except Prozac) in under 18s, because of evidence that they increased incidence of self-harm and suicidal thoughts in this age group.[22]

As a result of the concerns about tolerability and effectiveness, clinicians are now being advised not to prescribe antidepressants in cases of less severe depression. The National Institute For Clinical Excellence guidelines to the NHS state: 'Antidepressants are not recommended for the initial treatment of mild depression, because the risk-benefit ratio is poor'.[23]

1.5 A dilemma for GPs

This places GPs in a difficult position. They are under pressure to provide relief for increasing numbers of patients, and yet the historical mainstay of their treatment for depression has become subject to doubts, and is even contraindicated in some circumstances.

How are GPs dealing with this dilemma? In November 2004, the Mental Health Foundation commissioned a survey of GPs in the United Kingdom in order to find out how they were responding to patients with mild or moderate depression. It aimed to find out why they employed particular responses, what they felt were the most effective strategies for managing the condition, and whether they felt they had sufficient access to appropriate treatments. The results (detailed in section 2.0 and 4.0) indicate that GPs are less than wholehearted in their attitude towards antidepressants, but that they continue to prescribe them as their most common treatment response. Our research indicates that the primary reason for this discrepancy is that GPs believe they have insufficient access to viable alternative treatments.

1.6 Another response: exercise therapy

There is an approach to mild or moderate depression that is currently neglected, and which could make a significant improvement to the treatment offered in primary care, if used more

widely. It could relieve pressure on and increase the options available to GPs, reduce prescribing costs to the National Health Service, and empower patients with a different way of managing and recovering from their condition. That approach is the provision of exercise therapy.

A substantial body of research indicates that exercise can be an effective treatment for people experiencing depression. The benefits of exercise for mental health have been highlighted by the Chief Medical Officer[24], and existing clinical guidelines for treating depression recommend that GPs advise their patients of these benefits.[25] Exercise is a popular option among patients[26], it is thought to be less expensive to deliver than other non-pharmacological interventions[27], and it is good for physical as well as mental health.[28] Most importantly, the mechanisms for delivering exercise in a primary care context already exist in many areas, in the form of exercise referral schemes.

Our findings indicate that GPs have not given much consideration to the use of exercise as a treatment for depression. Of course, some GPs do not have access to exercise referral schemes, but of those who do very few use it for their patients with depression. In spite of the evidence and clinical guidelines, many GPs are not yet convinced that exercise is an effective intervention for depression. Of course, offering exercise therapy would represent a major change in prescribing behaviour, and such changes do not happen overnight, or simply because of new research or a change in clinical guidelines. They require active marketing of the evidence and opportunities to all those who might benefit from being aware of them – in this case GPs, healthcare policymakers, patients, and the general public.

In the light of pressures placed on primary care to manage the load created by depression, and the uncertainties created by the changing climate regarding antidepressants, it is urgent and important that information about alternative treatment options is disseminated. Therefore, this report represents the start of a major Mental Health Foundation campaign to ensure that the research on the value of exercise reaches GPs, healthcare policymakers, patients and the general public. Our campaign aims to remove the main obstacle to the use of exercise as a first-line treatment for mild or moderate depression in primary care – the failure of information to reach those who might be able to make use of it.

1 National Institute For Clinical Excellence (2003) Depression, Nice Guideline, Second Consultation. London: NHS, pp19, 21.

2 Norwich Union (2004) Health Of The Nation Index. http://www.healthofthenation.com/html/focus.htm.

3 National Institute For Clinical Excellence (as in no 1) p13.

4 National Institute For Clinical Excellence (as in no 1) p20.

5 For example, see Kramer, P. (1993) *Listening To Prozac: A Psychiatrist Explores Antidepressant Drugs And The Remaking Of The Self.* New York: Viking.

6 National Institute For Clinical Excellence (as in no 1) p143.

7 Department of Health (2004) Prescription Cost Analysis 2003. London: Department of Health, p117.

8 Kirsch, I., Moore ,T., Scoboria, A., Nicholls, S. (2002) The Emperor's New Drugs: An Analysis Of Antidepressant Medication Data Submitted To The US Food And Drug Administration. *Prevention And Treatment* Vol 5 Article 23.

9 National Institute For Clinical Excellence (2004) CG23 Depression: Management Of Depression In Primary Care – NICE Guidance., London: NHS p17.

10 Schwenk, T.L., Coyne, J.C., Fechner-Bates, S. (1996) Differences Between Detected And Undetected Patients in Primary Care And Depressed Psychiatric Patients. *Gen Hosp Psychiatry* Vol 18 no 6 pp407-15.

11 Consumers' Association (2003) Mild Depression In General Practice: Time For A Rethink. *Drug And Therapeutics Bulletin* Vol 4 No 8 p1.

12 Kirsch, I. et al (as in no 8).

13 See Lynch, T. (as in no 15) p126, or, for example, Khan, A., Warner, H., Brown, W., (2000) Symptom Reduction And Suicide Risk In Patients Treated With Placebo In Antidepressant Clinical Trials: An Analysis Of The Food And Drug Administration Database. *Archives of General Psychiatry* Vol 57 (4) pp311-317.

14 Fisher, S., Greenberg, R., (1995) Prescriptions For Happiness. Effectiveness Of Antidepressants. *Psychology Today* vol 28 (5), pp32-36.

15 Bradstreet, S. (2004) All You Need To Know. *Mental Health Today* May 2004, p27.

16 Antonuccio, D., Burns, D., Danton ,W. (2002) Antidepressants: A Triumph Of Marketing Over Science. *Prevention And Treatment* Vol 5 Article 25.

17 Wyeth Pharmaceuticals (2004) Efexor: Summary Of Product Characteristics. Maidenhead: Wyeth Pharmaceuticals.

18 Lynch, T. (2004) *Beyond Prozac: Healing Mental Distress.* Llangarron: PCCS p68.

19 National Institute For Clinical Excellence (as in no 1) p145.

20 Lynch T. (as in no 13) pp71-2.

21 Healy, D., Whitaker, C. (2003) Antidepressant And Suicide: Risk-Benefit Conundrums. *Journal Of Psychiatry And Neuroscience* Vol 28 (5) p331.

22 Medicines And Healthcare Products Regulatory Agency (2003) Message Sent To Health Professionals Including a Leaflet For Patients. http://www.mhra.gov.uk/.

23 National Institute For Clinical Excellence (as in no 9) p5.

24 Department of Health (2004) At Least Five A Week: Evidence On The Impact Of Physical Activity And Its Relationship To Health. London: Department of Health p58.

25 National Institute For Clinical Excellence (as in no 9) p15.

26 Martinsen, E. (1990) Benefits Of Exercise For The Treatment Of Depression. *Sports Medicine* Vol 9 p388.

27 National Institute For Clinical Excellence (2004) Costing Clinical Guidelines: Depression (England And Wales). London: NICE pp4, 13, 15.

28 Department of Health (as in no 19).

2.0 How do GPs operate and what do they think?

2.1. Our research: aims and scope

Research commissioned by the Mental Health Foundation in November 2004 was designed to discover how GPs respond to patients who present with mild or moderate depression, and how they feel about their responses. A survey was carried out by NOP World Health, in the form of a confidential questionnaire placed online and self-completed by a nationally representative, quota-controlled sample of 200 NHS GPs. The results reveal a significant difference between GPs' beliefs about how mild or moderate depression ought to be treated, and how they actually respond in practice.

2.2 Our research: results (I)

According to our research:

- 55% of GPs most commonly prescribe antidepressants as their first treatment response to mild or moderate depression. 35% believe that antidepressant medication is the most effective strategy for these patients. 38% would try antidepressants first if they became depressed themselves.
- 32% of GPs most commonly refer to some form of psychotherapy or counselling as their first treatment response. 55% believe some form of psychotherapy or counselling to be the most effective strategy for these patients.
- 71% of GPs believe that antidepressants are 'quite effective'. 23% of GPs consider them 'very effective'.
- 57% of GPs believe that antidepressants are prescribed too often. 60% of GPs would prescribe antidepressants less frequently if other treatment options were more available to them.
- 40% of GPs agree that antidepressants are not as effective as the public thinks they are.
- 42% of GPs 'strongly agree' or 'agree' that most patients given antidepressants would be as likely to get better if they were unknowingly prescribed a placebo.
- 61% of GPs agree that antidepressants are not generally effective unless used as part of a wider, individually-tailored care package.
- 78% of GPs have prescribed antidepressants in the last three years despite believing that an alternative treatment might have been more appropriate. 66% have done so because a suitable alternative was not available, and 62% because there was a waiting list for the suitable alternative.

These results confirm that drug therapy remains the treatment most often offered by GPs to people with mild or moderate depression. However, they also point to a degree of conflict between what doctors think and what they do. Although they prescribe antidepressants

frequently, GPs' support for their use is not wholehearted. Most consider them 'quite effective' rather than 'very effective', and a majority believe that antidepressants are prescribed 'too often'. An even greater proportion have prescribed antidepressants to patients despite believing that an alternative approach might have been more effective, and most say they would prescribe them less frequently if they had greater access to alternative options. GPs' limited confidence in antidepressants seems to be reflected by the fact that only a minority would turn to medication first if they became depressed themselves.

Figure 1: GPs most common treatment responses vs what they believe to be the most effective strategies for mild or moderate depression.

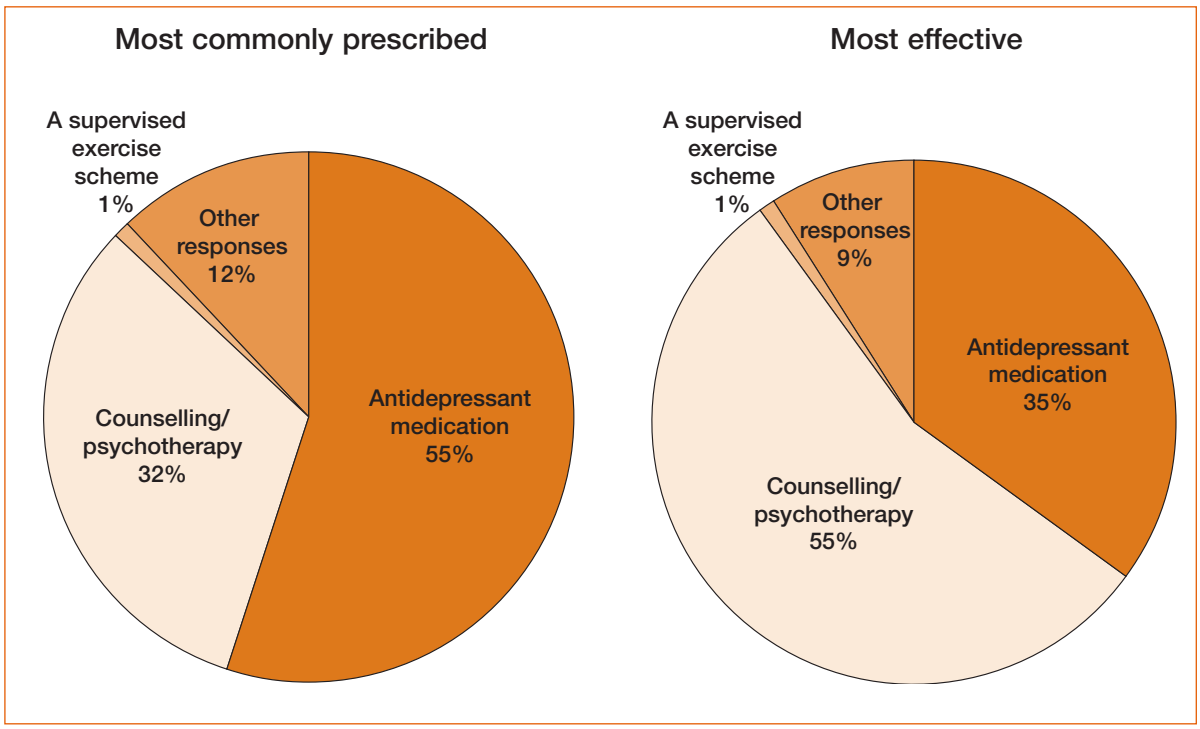


Figure 2: GPs opinions on the frequency with which antidepressants are prescribed.

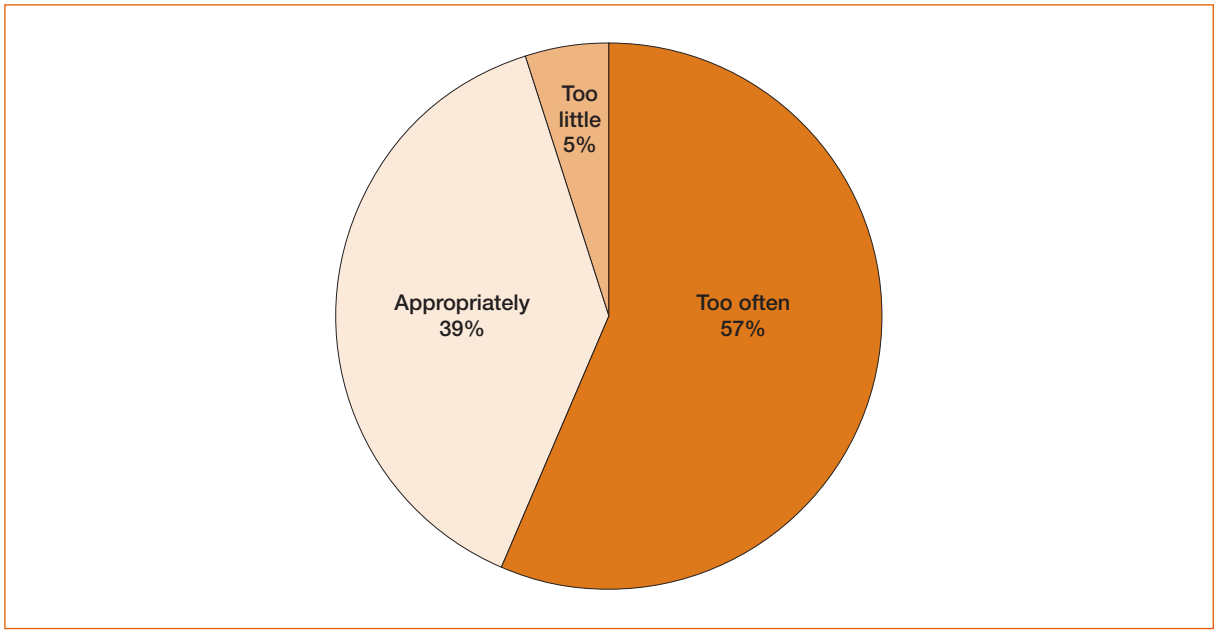


Figure 3: GPs who have prescribed an antidepressant in the last three years, despite believing that an alternative treatment might have been more appropriate.

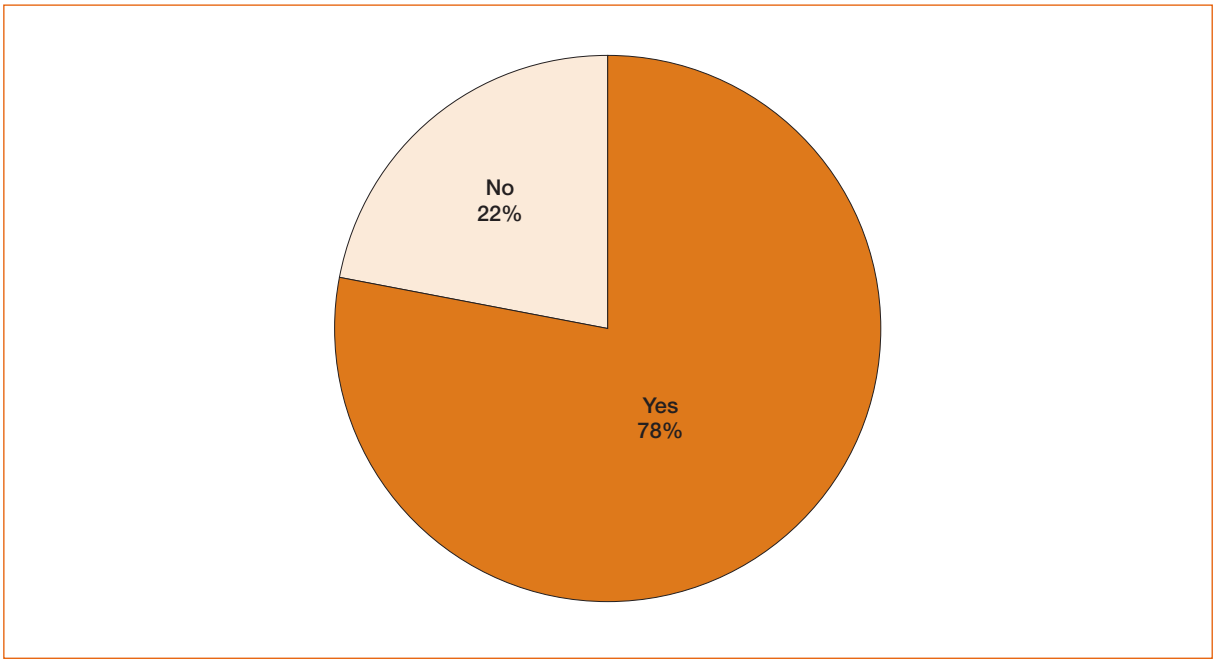
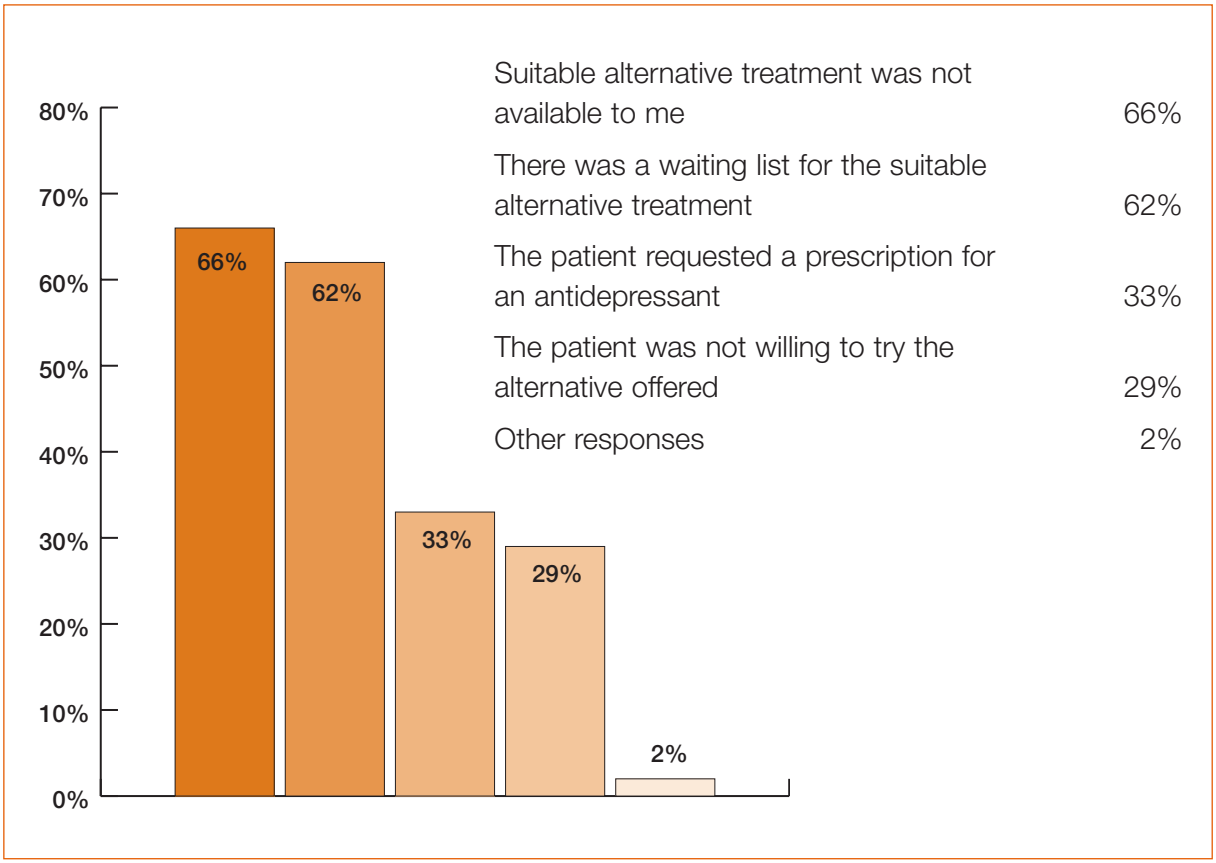


Figure 4: GPs reasons for prescribing antidepressants in these cases.



2.3 Our research: analysis (I)

Our findings are consistent with figures revealing a high number of prescriptions for antidepressants. However, they are also consistent with concerns about safety and effectiveness – GPs are not wholly comfortable about the frequency with which they prescribe antidepressants. So why do they prescribe them so often? There are several plausible reasons for this, including:

1. Pressure to act

Faced with patients in distress, it is understandable that GPs will want to offer immediate relief. The patient may have come in the hope and expectation of a fast-acting solution to their distress, (perhaps having been influenced by the reputation of drugs such as Prozac). The doctor, professionalised into his or her role as a prescriber of drugs, may feel obliged to provide a pharmacological treatment – even if he or she is not entirely convinced it is the best option. Our research found that 33% of doctors have prescribed an antidepressant specifically because a patient requested it, despite thinking that an alternative treatment might have been more appropriate.

2. Time poverty

Our research shows that the likelihood of GPs prescribing antidepressants as a first treatment response increases with the number of patients on their respondents list, from 52% of those with fewer than 1,875 patients, to 82% of those with over 2,250 patients. This seems to suggest that those GPs who are more time-pressured are also more likely to prescribe antidepressants, a treatment that can be administered quickly.

3. Limited availability of preferred alternatives

A majority of GPs (55%) believe that some form of psychotherapy or counselling is the most effective response to mild or moderate depression (24% opting for 'cognitive behavioural therapy', and 31% for 'another form of psychotherapy or counselling'). However, psychotherapy and counselling can be expensive and there is limited availability on the NHS.[29] This may be why only 32% of GPs use it as their first treatment response (3% referring to 'cognitive behavioural therapy', and 29% referring to 'another form of psychotherapy or counselling'). When asked what would be the most useful strategy to reduce the incidence of depression among primary care patients, the most popular response was greater access to psychotherapy and counselling (44%). A further 30% believe greater investment in improving social supports (such as improved housing, greater employment opportunities and reducing poverty) would be the most useful strategy. However, without sufficient referral access to psychotherapy and counselling, or the power to improve patients' social supports, GPs may understandably opt for the immediately available response – a prescription for antidepressants.

4. Limited visibility of non-pharmacological, non-psychotherapeutic alternatives

Compared to antidepressants, trials of which are largely funded by the pharmaceutical industry, there are relatively low levels of funding available for research into non-pharmacological, non-psychotherapeutic treatments for depression (such as exercise). Also, research that *is* carried out into such alternatives may well not reach GPs or other healthcare decision-makers. Those who conduct such research are unlikely to be able to match the marketing power of the pharmaceutical industry, which invests heavily in promoting their products to and investing in relationships with GPs.[30, 31]

5. Expediency

Our research suggests that many doctors are aware of the strong placebo response that an antidepressant may produce (42% believing their patients would be as likely to improve if given a placebo instead of an antidepressant). Given the limited availability of preferred alternatives, some may prescribe antidepressants as an expedient, in the hope of inducing such a response. As Professor Irving Kirsch, chair of psychology at the University of Plymouth, and an expert on the placebo effect, says: 'You give somebody a pill that's been touted as a cure for the worst thing in their lives. What that does is instill hope, which is the opposite of depression'.[32]

6. The dominance of pharmacology

For the last half century, antidepressant medication has been the 'status quo' response to depression in primary care – so it is hardly surprising if GPs tend to reach for the prescription pad first. This response is reinforced by heavy pharmaceutical industry marketing of antidepressants, which tends to frame depression primarily as a biological disorder that can be treated expertly and safely with drugs.[33] However, it may be that recent critical media coverage of the newer antidepressants, together with changes in clinical guidelines, has begun to alter GPs' attitudes to the drugs they prescribe. Aware of the imperfections of antidepressants, they are becoming open to examining different ways of responding. It is striking that when GPs were asked what would be the most useful strategies for reducing depression amongst primary care patients, the option most congruent with the pharmacological approach (greater investment in research to evaluate and improve antidepressant medication) was selected by only 1% of GPs. Our research may indicate that GPs are prepared for behaviour change. However, that behaviour change is only likely to occur when they are aware of and have access to practical, well-evidenced alternatives to medication prescription.

2.4 Implications

It is clear that many GPs are uncomfortable with the way mild or moderate depression is managed in primary care, and that their discomfort is linked to the pressures and constraints under which they operate. How, then, can they be supported in developing a practice that is more congruent for them, and more helpful for patients?

Our research indicates that, above all, GPs would like more access to alternative treatment options, and that their prescribing behaviour would alter significantly if they were given such access. It also shows that most GPs believe that antidepressants are not generally effective as a treatment for mild or moderate depression unless they are used as part of a wider, individually-tailored care package.

GPs believe two strategies would be most likely to reduce the incidence of mild or moderate depression in primary care patients. The first is increased provision of psychotherapy and counselling, which would enable people with depression to address their problems in the context of their whole life situation. The Mental Health Foundation agrees that depression is best treated with whole person approaches, and has consistently advocated better access to evidence-based psychotherapy and counselling (such as cognitive behavioural therapy) in primary care.

The second strategy advocated by GPs is to invest in developing patients' social supports, such as improved housing, greater employment opportunities and reduced poverty. In this

respect, the Mental Health Foundation believes, there would be a great benefit to be had from developing a coherent government strategy to maintain and improve public mental health, and from framing social policy in a mental health context. Clearly, this is not something that GPs can be expected to deliver within the framework of primary care.

However, there is a third option – exercise – that, it seems, most GPs have yet to consider seriously. Exercise as a treatment for depression has been well-researched, and the research suggests it is at least as effective as antidepressants. And unlike a broad public mental health strategy, it *can* be delivered in a primary care context (indeed, exercise referral schemes already exist in many areas, although they tend to be thought of primarily as treatments for physical health conditions). As with psychotherapy and counselling, exercise therapy involves referring the patient to qualified professionals, thus reducing time pressure on the GP and relieving him or her of the burden of single-handedly managing patients' treatment. It also offers the patient a strong social support structure as he or she begins to recover, and has far fewer negative side effects than antidepressants. Actually, it has many positive side effects, many of which contribute towards the patient's overall health, as well as his or her mental health.

2.5 A way forward?

The Mental Health Foundation believes that exercise therapy, delivered in an appropriately supervised context, could make a significant difference to many people presenting in primary care with mild or moderate depression. The increased promotion and use of exercise referral as a first-line treatment for mild or moderate depression could expand patient choice and power over their recovery – depression is a condition that thrives on perceptions of powerlessness, and such an expansion of choice and power may itself have therapeutic effects – as well as helping them effect a sustainable lifestyle change that might well continue to support their mental (and physical) health in the long term. It would also empower GPs with another treatment option, giving them greater scope to offer holistic and wide-ranging care plans to their patients. And ultimately, it could reduce the cost burden on the NHS prescription budget, by giving GPs greater freedom to explore non-pharmacological approaches to treatment, and discouraging patients with mild or moderate depression from long-term dependence on medication.

However, despite a substantial evidence base, clear clinical guidelines, patient preference and positive side effects, very few people who present to their GPs with mild or moderate depression are likely to be offered exercise as a treatment option. This is not surprising, given that many GPs do not have access to the schemes, and those that do rarely use them for their depressed patients. Without the budget or staffpower resources to effectively communicate the research data on exercise and depression to GPs, proponents of exercise therapy and the co-ordinators of exercise schemes are hard pressed to deliver their message.

The remainder of this report will be devoted to examining in more detail the value of promoting and using exercise therapy as a treatment for mild or moderate depression in primary care.

The impact of experience on GP decision-making

More experienced GPs are far less likely to prescribe and to believe in the effectiveness of antidepressants than their less experienced colleagues. 39% of GPs who qualified before 1980 most commonly prescribe antidepressants as their first treatment response to mild or moderate depression, compared to 64% of GPs who qualified in the 1980s and 53% of those who have qualified since. 29% of GPs who qualified before 1980 believe antidepressants to be the most effective strategy for patients with mild or moderate depression, compared to 44% of GPs who qualified in the 1980s and 31% of those who have qualified since. This could reflect that experience, or it could be due to age – they are more likely to have grown up (and trained) before the biochemical deficiency theory of depression was widely promoted, and may display a greater scepticism towards the drugs associated with it. More recently-qualified GPs are slightly less favourable to antidepressants than those who qualified in the 1980s, a finding that may reflect the beginnings of a shift in the philosophy of medical educators and their students.

29 National Institute For Clinical Excellence (2004) (as in no 22) p12.

30 Moynihan, R. (2003) Who Pays For The Pizza? Redefining The Relationship Between Doctors And Drug Companies. *British Medical Journal* 326, pp1189-92.

31 Brook, R. (2004) Medicines Regulation In The UK: The Case For Reform. *Journal Of Mental Health* Vol 13 (5) p435.

32 Quoted in Greenberg, G. (2003) Is It Prozac? Or Placebo? *MotherJones.com* Nov/Dec 2003 http://www.motherjones.com/news/feature/2003/11/ma_565_01.html.

33 For example, the PIL (patient information leaflet) produced by Eli Lilly for its antidepressant Prozac states that: “Depression is caused by a disturbance in the chemistry of your brain which usually responds well to antidepressant treatment.” Eli Lilly (2003) Patient Information Leaflet (Prozac). Indianapolis: Eli Lilly.

3.0 The case for exercise therapy as a treatment for mild or moderate depression

3.1 Evidence

The physical health benefits of a balanced programme of regular exercise are well-established and widely accepted. People who lead active lifestyles enjoy lower rates of coronary heart disease, stroke, high blood pressure, some cancers, type 2 diabetes, osteoporosis, and obesity, plus a reduced risk of premature mortality in general of about 20-30%.[34] Exercise has positive effects on the musculoskeletal, cardiovascular, respiratory and endocrine systems, and helps build and maintain healthy muscles, bones and joints.[35]

The mental health benefits of physical activity are also well-established. Exercise has been associated with reduced anxiety, decreased depression, enhanced mood, improved self-worth and body image, and improved cognitive functioning.[36] However, these benefits have been less widely reported, and are less well-understood and accepted, either by health professionals or the public.

Over the past 30 years, a substantial body of literature linking physical activity and reduced incidence of depression has accumulated. A 1993 review found that 90% of studies investigating the effect of exercise on depression reported antidepressant effects[37], while five years later, an analysis of 80 studies concluded that there was 'positive support for a relationship between physical exercise and depression'.[38] In 2001, another meta-analysis of studies examining the effectiveness of exercise as a treatment for depression, published in the British Medical Journal, found that exercise compared to no treatment scored a weighted mean difference on the Beck Depression Inventory of –7.3.[39]

Four comparative studies have indicated that physical activity can be as successful at treating depression as psychotherapy, while another two have found exercise to be as successful at treating depression as medication.[40] In 1999, a study conducted at Duke University in the United States found that exercise was as effective at treating depression as SSRI antidepressants in the short term (four months), and more effective in the longer term (10 months).[41] Its authors concluded that 'exercise is a feasible therapy for patients suffering from major depressive disorder and may be at least as effective as pharmacotherapy'.

Exercise also appears to be an effective prophylactic against depression. A study of male Harvard alumni found that the relative risk of depression over a 25-year period was 27% lower for those men who played three hours or more of sport per week.[42] A 1988 study found that over eight years, women who had engaged in little or no activity were twice as likely to develop depression as those who had engaged in 'much' or 'moderate' activity.[43]

Many people have an intuitive understanding that physical activity helps them 'feel good', but verifying their experience into a scientifically rigorous evidence base has sometimes proved problematic – the variability of individual experience, limited scope of existing studies, prohibitive cost of carrying out large-scale trials and difficulty of controlling adequately for coinciding factors have tended to impede the progress of research. There may even have been a sense among highly trained professionals that exercise is 'too simple' a response to a condition as complex as depression, or that encouraging physical activity in a highly unmotivated population group is unrealistic (despite the possibility that a gentle programme of exercise may be an effective way to build and sustain motivation).

Nevertheless, in the last few years, prominent researchers have been prepared to declare their confidence in the link between exercise and a reduction in depressive symptoms. In 2000, Biddle, Fox, Boutcher and Faulkner reviewed the evidence in their book *Physical Activity And Psychological Well-Being*, and concluded that: 'overall, the evidence is strong enough for us to conclude that there is support for a causal link between physical activity and reduced clinically defined depression. This is the first time such a statement has been made.'[44] In 2002, Daley agreed that: 'there is widespread support for a positive and lasting relationship between participation in regular exercise and various indices of mental health…the evidence for psychological benefits, although impressive for mentally healthy individuals, is even stronger for psychiatric populations.'[45] And in 2004, Craft and Perna similarly concluded that: 'The overwhelming majority (of studies) have described a positive benefit associated with exercise involvement' and that 'there is strong evidence to advocate the use of exercise as a potentially powerful adjunct to existing treatments.'[46]

Official guidance has also begun to reflect the weight of evidence in favour of exercise therapy as a response to mild or moderate depression. In April 2004, a report from the Chief Medical Officer on the impact of physical activity and its relationship to health stated that: 'Physical activity is effective in the treatment of clinical depression and can be as successful as psychotherapy or medication, particularly in the longer term.' Later the same year, a Government White Paper, *Choosing Health*, stated that: 'People with poor mental health tend to experience worse physical health than the rest of the population. Yet there is evidence that a healthier lifestyle will improve not just physical health but also mental health, mood and well-being. For example, regular physical activity reduces the risk of depression and has positive benefits for mental health including reduced anxiety, enhanced mood and self-esteem.'[47] In December 2004, the National Institute For Clinical Excellence recommended in its guidelines for treating depression in primary and secondary care that: 'Patients of all ages with mild depression should be advised of the benefits of following a structured and supervised exercise programme of typically up to three sessions per week of moderate duration (45 minutes to one hour) for between 10 and 12 weeks.'[48]

3.2 Possible modes of operation

There are several theories as to how exercise is beneficial to mental health, and it may well be that a combination of each comes into play. The main theories are:

Biological/Chemical

Exercise leads to an increased release of endorphins and enkephalins, chemicals that may promote feelings of well-being and pain relief.

Social

Exercise enables people to build new social networks and relationships, and the development of these relationships may help combat and prevent depression.

Esteem-boosting

Exercise involves learning new skills and achieving goals, the mastery and attainment of which may improve self-worth. Exercise also improves physical body condition, which in turn may improve self-worth.

Distraction/Flow

Exercise can create a diversion from the preoccupation with negative thoughts that is characteristic of depression, and provides an alternative focus for attention.[49] Some people report that exercise creates in them a 'flow experience', which has been described as 'the state in which people are so involved in an activity that nothing else seems to matter'.[50]

3.3 The advantages of exercise therapy

According to the National Institute For Clinical Excellence, a number of different treatment approaches may be equally effective when it comes to the treatment of mild or moderate depression.[51] This being the case, there are strong reasons for promoting exercise therapy as a first-line treatment. These include the following:

1. Exercise is cost-effective and available

Compared to pharmacological and (especially) psychological interventions, exercise therapy is cost-effective. Even when delivered through a structured programme (such as an exercise referral scheme – see evaluation of South Tyneside scheme, page 35), it seems that physical activity can cost less over an equivalent period of time. And although exercise referral schemes are not yet available to everyone, all except those in very poor physical health are able to take some form of exercise, making it an option that is far more available than many psychological treatments.

2. Exercise has co-incidental benefits

Unlike antidepressant medications, which carry significant risk of unpleasant – and perhaps even dangerous – side effects, physical activity is relatively low risk. Indeed, as we have seen, the 'side-effects' of exercise include reduced risk of several major diseases, healthier muscles, bones and joints, improved cardiovascular fitness and a 20-30% reduction in the chances of premature mortality. It can also provide a sense of achievement, greater energy levels and improved physical appearance. As Nanette Mutrie, Professor of Exercise and Sport Psychology at the University of Strathclyde says: 'The potential benefit of advocating the use of exercise as part of a treatment package for depression far outweighs the potential risk that no effect will occur.'[52] This is especially true given that people with mental health problems are generally less physically active and fit compared to the population as a whole, and that this may in itself be a contributing factor to their condition.

3. Exercise is an active, sustainable recovery choice

A common characteristic of depression is a sense of not having, or having lost, the ability to make choices. And whereas some treatments can reinforce the sense of being a 'passive recipient' of care, and thus potentially reinforce the depression itself, exercise requires the active participation of the individual – to set goals and interact with people at the place of exercise. And although a programme of physical activity may at first be carried out under the

supervision of an exercise professional, it is the effort provided by the individual that will make the programme a success. This encourages belief in one's own robustness and powers of recovery. Also, once an exercise programme has been established, it can be maintained without continued professional supervision.

4. Exercise is a 'normalising' experience

Some patients dislike the idea of taking medication or undergoing psychotherapy because of the stigma they feel such treatments carry with them. Exercise, on the other hand, tends to be seen as something done by healthy people, and carries no stigma. By exercising, people may identify themselves as 'normal' and 'healthy', and the association may help improve their mood. Exercising with others promotes social inclusion[53], which itself tends to alleviate feelings of depression.

5. Exercise is a popular treatment

It is important to note that people with experience of depression frequently cite exercise as being an important and positive part of their recovery programme. There has been a paucity of qualitative studies of scenarios in which exercise has been used to treat depression, and quantitative methods often fail to convey the richness of experience reported by some of those who employ exercise as a recovery strategy. Nevertheless, one survey of people who had experienced mental health difficulties found that 50% felt exercise had helped them to recover[54], while another reported that 85% of those who had used exercise as a treatment found it helpful to them – the highest percentage positive response for any non-medical intervention.[55] Another study found that patients ranked exercise as 'the most important element' in comprehensive treatment programmes for depression.[56] Although it is commonly believed that people with depression will be resistant to exercise, retention rates are often much higher than for treatments such as medication. Although they vary considerably between different exercise referral schemes, programme completion rates in the region of 65% over the duration of some schemes have been reported.[57] The National Institute For Clinical Excellence recommends that: 'Patient preference and the experience and outcome of previous treatment(s) should be considered in determining the choice of treatment.'[58] Offering exercise as a treatment for mild or moderate depression would seem to be very much in the spirit of enhancing patient choice, which, in a condition that is often characterised by a sense of powerlessness, is itself an important factor in facilitating recovery.

34 Department of Health (as in no 19).

35 National Center For Chronic Disease Prevention and Health Promotion (1999) Physical Activity And Health: A Report Of The Surgeon General. Atlanta: Centers For Disease Control And Prevention.

36 Biddle, S., Fox, K., Boutcher, S. eds (2000) *Physical Activity And Psychological Well-Being.* London: Routledge pp154-158.

37 Byrne, A., Byrne, D., (1993) The Effect Of Exercise On Depression, Anxiety And Other Mood States. *Journal Of Psychosomatic Research* Vol 37 (6) pp565-574.

38 Scully, D., Kremer, J., Meade, M., Graham, R., Dudgeon, K., (1998) Physical Exercise And Psychological Well-Being: A Critical Review. *British Journal Of Sports Medicine* Vol 32 (2) pp111-120.

39 Lawler, D., Hopker, S., (2001) The Effectiveness Of Exercise As An Intervention In The Management Of Depression. *British Medical Journal* Vol 322 pp1-8.

40 Department of Health (as in no 19) p59.

41 Babyak, M., Blumenthal, J., Herman, S., Khatri, P., Doraiswany, M., Moore, K., Craighead, W., Baldewicz, T., Krishnan, K. (2000) Exercise Treatment For Major Depression: Maintenance Of Therapeutic Benefit At 10 Months. *Psychosomatic Medicine* Vol 62 (5) pp633-8.

42 Paffenberger, R., Lee, I., Leung, R. (1994) Physical Activity And Personal Characteristics Associated With Depression And Suicide In American College Men. *Acta Psychiatrica Scandinavica* Vol 377 pp16-22.

43 Farmer, M., Locke, B., Moscicki, E., Dannenberg, A., Larson, D., Radlof, L. (1988) Physical Activity And Depressive Symptoms: The NHANES I Epidemiologic Follow-Up Study. *American Journal Of Epidemiology* Vol 128 pp1340-1351.

44 Biddle, S., Fox, K., Boutcher, S., Faulkner, G. (2000) The Way Forward For Physical Activity And The Promotion of Psychological Well-Being, in Biddle, S., Fox, K., Boutcher, S. (as in no 36) p155.

45 Daley, A. (2002) Exercise Therapy And Mental Health In Clinical Populations: Is Exercise Therapy A Worthwhile Intervention? *Advances In Psychiatric Treatment* Vol 8 pp262-70.

46 Craft, L., Perna, F. (2004) The Benefits Of Exercise For The Clinically Depressed. *Primary Care Companion To The Journal of Clinical Psychiatry* Vol 6 pp104-111.

47 Department of Health (2004) Choosing Health: Making Healthier Choices Easier. London: Department Of Health p132.

48 National Insititute For Clinical Excellence (as in no 9) p15.

49 For further discussion see Daley (as in no 45), and Artal M. (1998) Exercise Against Depression. *The Physician And Sports Medicine* Vol 26 (10).

50 Csikzentmihali, M. (1990) *Flow:The Psychology Of Optional Experience.* New York: Harper And Collins p4.

51 National Institute For Clinical Excellence (as in no 1) p31.

52 Mutrie, N. (2000) The Relationship Between Physical Activity And Clinically Defined Depression in Biddle, S., Fox, K., Boutcher, S (as in no 36) p60.

53 NHS (2001) Exercise Referral Systems: A National Quality Assurance Framework. London: NHS p4.

54 Mind (2001) Latest Mind Survey Provides Good News: Press Release. London: www.mind.org.uk.

55 National Schizophrenia Fellowship, Mind, Manic Depression Fellowship (2000) A Question Of Choice. London: NSF/Mind/MDF p30.

56 Martinsen, E. (as in no 21).

57 Labour Research Department (2004) Exercise On Prescription: A Report For The Chartered Society Of Physiotherapy London: Labour Research Department p9.

58 National Institute For Clinical Excellence (as in no 1) p31.

4.0 Exercise therapy in the treatment of mild or moderate depression: current practice in primary care

4.1 Our research: results (II)

Our findings indicate that very few people who present to their GP with depression are likely to be offered exercise as a treatment option.

According to our research:

- 5% of GPs refer to a supervised programme of exercise as one of their three most common treatment responses to mild or moderate depression. This compares to 92% who use antidepressants as one of their three most common responses.
- 11% of GPs believe that a supervised programme of exercise is one of the three most effective strategies for patients presenting with mild or moderate depression.
- 4% of GPs believe that a supervised programme of exercise is a 'very effective' treatment for patients with mild or moderate depression. Another 37% of GPs think it is 'quite effective'.
- 14% of GPs believe that a supervised programme of exercise is more likely than prescription of antidepressants to help someone presenting with mild or moderate depression.
- 42% of GPs say they have access to an exercise referral scheme for their patients, but of these, none use it 'very frequently' for patients with mild or moderate depression, 15% use it 'fairly frequently', 54% use it 'not very frequently', and 31% use it 'not at all'.
- Of those GPs who use their exercise referral scheme 'not very frequently' or 'not at all' for patients with mild or moderate depression (or would use a scheme 'not very frequently' or 'not at all' if they had access to a scheme), 43% say it's because they aren't convinced that exercise is an effective treatment response to mild or moderate depression, and 39% say it's because most of their patients wouldn't be willing or able to carry out a programme of exercise.
- Curiously, when asked what they would do if they became depressed themselves, GPs become far more favourable to exercise. 11% would use a programme of exercise as their first treatment option in such a circumstance, and 42% would use it as one of their top three treatment choices. Do GPs have more faith in themselves than their patients to be able to carry out such a programme when depressed? Or is that when they take off their clinician's coat and apply a question to themselves as human beings rather than as 'patients', a 'non-scientific' approach such as exercise suddenly makes more sense?

Figure 5: GPs who would use antidepressant medication as one of their three most common treatment responses vs those who would refer to a supervised programme of exercise.

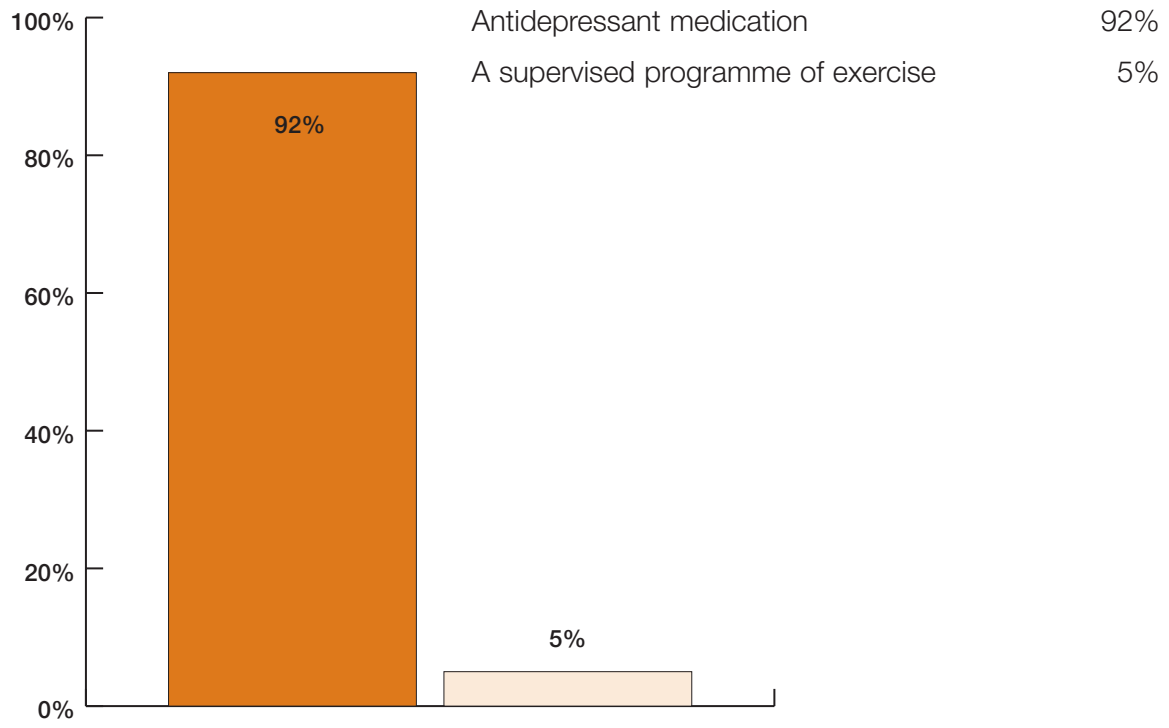


Figure 6: GPs usage of exercise referral schemes for patients with mild or moderate depression (excluding those who say they do not have access to a referral scheme).

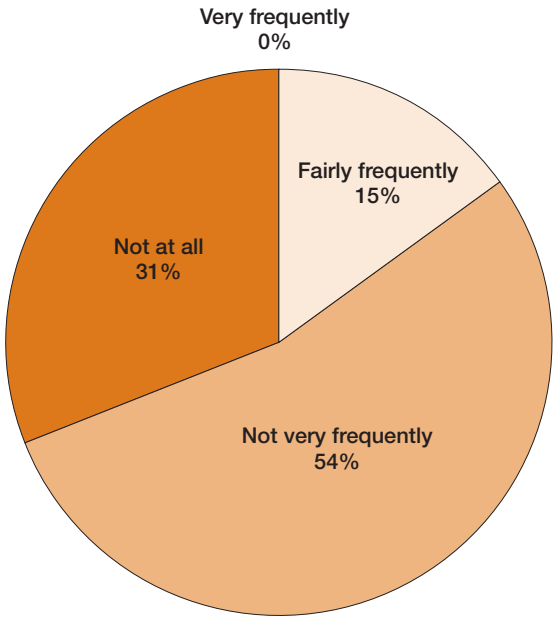
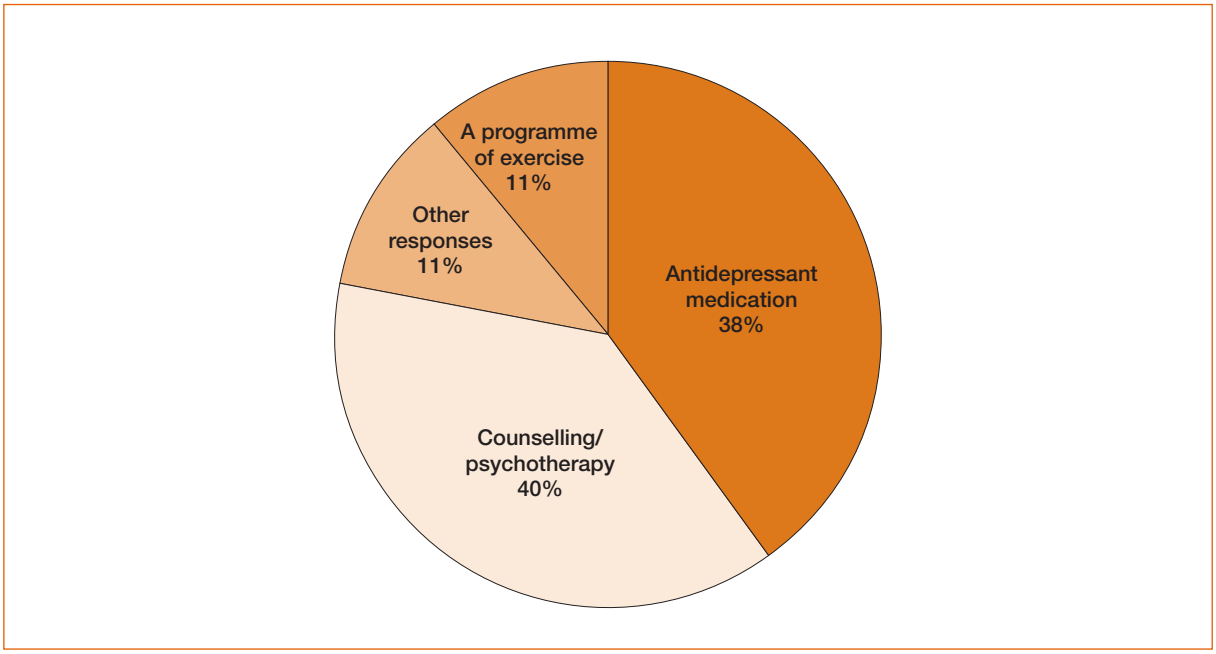


Figure 7: The strategies GPs would try first if they became depressed themselves.



4.2 Our research: analysis (II)

These results tally with those of a 2003 Mind Survey, which found that 8% of those who had experienced mental health difficulties had been referred to an exercise referral scheme.[59] It also supports consistent research that suggests GPs do not actively encourage physical activity in their patients as a whole, let alone those with mental health difficulties. For example, a 1999 study found that only 22% of GPs agreed that they 'try to encourage as many patients as possible to increase their physical activity.'[60] However, the same study suggests that GPs are aware of the importance of exercise to well-being, including mental well-being – 58% believed there was 'strong evidence' that exercise 'improves psychological well-being' and another 39% believed there was 'some evidence'.

It seems that while the vast majority of GPs believe exercise improves psychological well-being, a far smaller proportion have made the next logical step in their thinking – that exercise might be a useful strategy in treating mild or moderate depression – and only a few of those will actually refer their patients for exercise therapy. An expectation of low take-up among patients and lack of conviction in the effectiveness of exercise are the two reasons most commonly cited for not offering exercise as a treatment option, yet treatment completion rates may well be higher for exercise than for medication, and there is plenty of research evidence to back up the claims for the mental health benefits of physical activity.

Dr Adrian Taylor, of the School of Sport and Health Sciences at the University of Exeter, suspects that most GPs have not yet reached the point at which exercise figures in their thinking when dealing with depressed patients. 'In their busy daily routines, I'd say the vast majority of GPs are in the pre-contemplation stage of behaviour change when it comes to promoting exercise as a treatment for mental health problems. Britain is one of the worst countries for promoting lifestyle change in primary care, and while GPs might think about exercise for blood pressure and weight loss, I would guess that for mental health problems, 90% don't think about it.'

The experience of exercise referral (I)

Bea Thompson, 43, had been suffering from anxiety and depression for several years before being referred to the Active Lifestyles Exercise Referral Scheme in Bromley, London. She credits the programme as the catalyst for her recovery:

"At my low point, around October 2002, I was very ill and debilitated. I'm a graduate and I've worked in business and management, but I was homeless and had been socially housed in a completely different area. For about a year, I might have had interaction once a week – my mammoth task was to go out and make sure I had enough benefits or electricity, or to see a doctor.

In the middle of 2003 I saw a leaflet for the Active Lifestyles scheme in the GP surgery. I asked him if he would refer me, as I had a feeling that exercise would be good for me. However, I felt very anxious about going into the gym environment. The night before I couldn't sleep because I was so anxious about it and I was absolutely wrecked when I got there, but Gloria (the referral officer) was superb. She told me I'd done brilliantly just to get there, was totally positive and didn't think it was weird that this was a huge step for me.

When I left the gym that morning I felt as if someone had given me a million pounds – it was the sense of achievement, the fact that I'd been understood, the fact that I'd been able to do some work in a gym, and that I now had somewhere to go every Monday and Wednesday. I also had something to work towards – a goal – plus good support and a nice environment to go into.

Mentally, emotionally, psychologically and socially it was the best (treatment) I'd been given. It was like a club – the exercise referral people would give each other support and encouragement. There were people who'd had coronary operations, people with MS, people who'd had accidents and were doing rehab – everybody would come in and, whatever their ailment, they'd work out and be normal among other people who were doing the same. There was a huge sense of community. And the emphasis was positive – on getting well, getting fit, overcoming problems – as opposed to sitting in the clinic for a mental health appointment where it's all sharp intakes of breath and 'well, we're not quite sure what you've got, it could be an anxiety disorder and it might take six months'. At the gym it was like – we're all here and we're going to get well. I reckon the exercise itself was around 20% of it – the rest was getting into the habit of turning out twice a week, doing something physical, interacting with people.

It changed my world. I started rollerblading on a Sunday, I found a swimming club, and someone to play tennis with. And that all enabled me to have the confidence to go forward and find a part-time job. None of that would have been possible without Active Lifestyles and the emotional support I got there. It was the input from the team that made such a difference – if one day I was in a bad state they'd see me and listen to whatever it was I was upset about. It was always an attitude of 'everything can be overcome'. Whereas before then I had stopped believing in myself, and I had stopped trusting other people. The programme and the support that I got changed everything for me."

4.3 Exercise referral schemes: an overview

The first 'exercise on prescription' scheme in the UK was developed in 1983. Over the course of the last decade, as the emphasis on promoting physical activity in primary care has developed, the number of exercise referral schemes in operation has mushroomed. In 1994 there were 157 reported schemes, while a 2004 survey reported there were more than 800 across the UK.[61] The Wright Foundation, an organisation which offers training and consultancy services to exercise referral schemes, and which collated the figures cited in the 2004 survey, now estimates that there may be as many as 1,300 schemes nationwide.[62]

The schemes operate in a variety of forms, often involving a partnership between primary care trusts and local leisure services (frequently council-run). Typically, GPs and other health professionals can refer patients who might benefit. Conditions that might lead to a referral include coronary heart disease, diabetes, obesity, hypertension, osteoporosis, depression and anxiety. Once referred, clients are seen by a qualified exercise professional (someone who has been trained specifically in working with exercise referral populations) who is able to make a detailed assessment of their fitness for exercise, and develop with them an individual activity plan. Once the plan has been agreed, the client is given free or discounted access to a range of leisure facilities – these will probably include access to a 'traditional' gym, swimming pool, and exercise classes, but may also include options as diverse as yoga, archery or belly-dancing.

Throughout the prescribed programme, clients can draw on the referral officer for support – whether that be for a change of programme, questions about use of equipment, or as an aid to motivation – and follow-up assessments are scheduled at key points in the programme (for example, at 6 and 12 weeks during a 3 month programme). This support appears to be vital to the success of the schemes – it can be difficult to maintain motivation to exercise even among healthy populations – and the care and attention of the exercise professional is frequently cited by clients as a crucial factor in helping them to stay with the programme. The social element of the schemes (often bringing together different sets of people who nevertheless share a common goal) is also frequently mentioned by clients as a motivating factor, and, for those people with depression, as an aid to recovery.

Due to the evolutionary way in which exercise referral schemes have developed, the quality of services offered in the past varied greatly from scheme to scheme. However, in 2001 the National Health Service published a National Quality Assurance Framework for Exercise Referral Systems which set out comprehensive guidelines covering every aspect of delivering exercise referral: qualification requirements of exercise professionals working within schemes; identification of advanced training needs; the importance of applying models of behaviour change; the clinical and legal responsibilities of scheme managers and staff; the importance of smooth transfers of information about clients; guidance on the levels and nature of contact between exercise professionals and clients; methods of scheme evaluation; and the importance of systematic approaches for achieving long-term adherence to exercise.[63] Even now, there remains considerable variability as to scheme sizes and referral period durations, numbers of referrals accepted, levels of promotion to referring healthcare professionals, types of activity and range of locations offered, cost to clients, and levels of support. Nevertheless, since the publication of the NQAF, new and existing exercise referral schemes have had a clear, consistent, and well-structured set of good practice guidelines.

Sarah Van Hoof is the YMCA's course developer for exercise professionals who require training to work with special populations, and she runs a module in exercise and mental health as an 'add-on' element of the YMCA's GP referral scheme training. Van Hoof says that schemes are 'really tightening up' their ability to deal with the needs of clients who are referred for depression, but there is still a tendency among GPs to think of exercise referral schemes as only suited to those with primarily physical conditions. 'There is still this misconception that referral schemes are all about cardiac patients. It is changing – there are more people coming through to schemes with mental health issues, and GPs are becoming more aware that schemes will take them. But I think people need to know the schemes are there, and that exercise doesn't mean running flat out on a treadmill – it's something appropriate and enjoyable and not stressful. We're not talking about sending someone out running marathons. And there's still a culture out there of not challenging your doctor, so people are afraid to ask their GPs about alternatives (to medication). The culture hasn't changed enough for people to say: "Hang on, I know there's a GP referral scheme – and I want to be on it!"'

Of course, exercise referral will not work for every person – some will not be amenable to exercise as a treatment strategy at all, and some will not want to exercise in a 'leisure centre' setting (although alternatives are available in some places – see 5.1 The Green Gym). Nevertheless, with a substantial body of evidence supporting the use of exercise as an intervention in depression, a relative lack of negative side effects, and a strong cost-effectiveness argument, there are strong reasons for increasing the availability of high-quality exercise referral schemes to all areas, and encouraging GPs to offer them as part of a treatment package to people presenting with mild or moderate depression.

4.4 Case study one: South Tyneside exercise referral scheme

The South Tyneside exercise referral scheme was initiated as a pilot scheme in 1997 and is funded by a partnership of local council and primary care trust. It provides exercise opportunities for people with a range of conditions (most commonly coronary heart disease, diabetes and depression or anxiety), who were not physically active prior to joining the scheme. Clients on the scheme can use facilities at any of four leisure facilities at a heavily discounted rate (typically £1.25 per session).

Once they have been referred by a health professional, clients are sent a letter asking them to make an appointment with a referral officer. As well as being qualified exercise professionals, referral officers have received specific exercise referral scheme training, delivered by the Wright Foundation, as well as training to help them support clients with mental health problems, delivered by the YMCA.

The initial appointment lasts approximately one hour, during which the officer will go through a formalised assessment of clients' physical and mental health, before discussing their individual needs and requirements. Together they devise an appropriate programme of exercise – often gentle to begin with – taking into account their condition, medication, motivation and expectations. In their first session, clients are given an induction into the use of equipment, and officers are available for further consultation throughout the 24 weeks of the programme, with formal re-assessments at three and six months. As well as discounted access to general facilities, the scheme provides eight weekly classes tailored specifically for, and exclusively available to, referral clients.

An evaluation of the scheme was published in February 2004, with reference to the period November 2002 to May 2003.[64] It found that 171 people were referred to the scheme during this period, of whom 116 (68%) took up their place (requiring clients to make first contact is intended to recruit the most committed, thus maximising resources). 64% were referred by hospital clinics, and 36% by GP surgeries). Of those who signed up, 65% remained on the scheme after three months and 51% completed the six-month programme. Attempts by scheme co-ordinators to encourage health professionals to refer more often for mental health issues have been successful. Depression accounted for 33 referrals (28.4%) during the period of the evaluation, making it the second most common referral reason, after coronary heart disease. In the whole of 2001, there were just two referrals for mental health problems. Since the evaluation, Andrew Power, Physical Activities Co-ordinator and Project Manager, suggests that referral numbers have risen to an average of almost 60 per month, with almost a third of those referred for depression.

The scheme is valued by clients for its mental health benefits (and not just those specifically referred for stress, depression and anxiety). According to the evaluation, only 5% felt before they started the scheme that attendance would benefit their mental health. However, of those who attended their three-month evaluation, 46% reported a decrease in depressive symptoms (with 41% stable, and 13% reporting an increase). Three-quarters felt their general fitness had improved.

Peter Lawler, 47, referred by his GP for depression and interviewed after almost six months on the scheme, says: 'It's had a definite impact on my well-being. I've done about 15 to 20 sessions now, and I'm getting more positive in myself. I'm actually starting to enjoy it. I still get knackered, but I'm in a hall with people who have had massive strokes, massive heart jobs and I think: "If they can do it, so can I."'

As well as the benefits of exercise itself, the scheme provides human support. The length and depth of the consultations can encourage clients to share their difficulties with referral officers, who may become a significant point of contact during a difficult period. 'We're not counsellors,' says Melanie Hamleni, an officer on the scheme, 'but if clients feel the need to tell us something, we'll listen. I can't give them advice because I'm not trained for that, but they must feel they can talk to us.'

Clients are often nervous about the idea of attending a leisure centre, perhaps fearing they will feel out of place among 'superfit' gym attendees. 'They have a mixture of ages here, and they don't care what you're dressed in,' says Jackie Richards, a 47-old woman, interviewed during her fourth week on the scheme. 'If I hadn't been shown round first, I probably wouldn't have come. But it's not all lycra and good-looking stuff. I worried about that before I came.'

Taking up exercise can be a significant lifestyle shift, especially for clients who may have difficulties with motivation, and referral officers provide support that can help sustain behaviour change. 'If they've missed a session or two,' says Hamleni, 'we'll ring them to see if they're OK – people appreciate that, they feel that we haven't forgotten about them.' Peter Lawler agrees: 'When I first went, I was saying to myself mentally, "I can't do this", but Diane (Luther, Peter's referral officer), was there to keep asking me if I was OK and to ensure I didn't let it slip. You're not alone.'

Diane Luther says: 'If you can keep them going for the first four weeks, then they'll keep coming back, because by that point they know in their mind how much better they feel.' The officers

also aim, over the course of the scheme, to enable clients to make exercise part of their daily routine, so the habit lasts beyond the referral period. 'As well as coming twice a week,' says Hamleni, 'we encourage them to do something off their own back every day, without us there – like going for a walk.' The scheme works in tandem with a walking programme, Walking Works Wonders, which operates from Temple Park leisure centre in South Shields.

According to Andrew Power, referral habits of doctors and their attitudes to the scheme vary greatly. After extensive efforts to promote the scheme to health professionals, 28 of the 30 practices within South Tyneside PCT have signed up as potential referrers – however, of these, Power says that only one regularly refers more than 10 patients a month. Of the other practices, four regularly refer more than five patients a month, another five refer between two and five patients a month, 11 refer only occasionally (approximately once a month) and seven have never referred to the scheme. These variations suggest that patients' likelihood of being offered exercise referral is dependent on which practice they attend and the attitude of their GP to exercise referral, rather than on patient choice or suitability for exercise. According to the 2002-3 evaluation, only 29% of clients had heard of the scheme before being referred. It therefore seems likely that even with a scheme as proactive as this in operation, many people seeking help for mild or moderate depression will remain unaware of the opportunities for exercise therapy.

Professor Colin Bradshaw, a GP at Marsden Road Health Centre, and an enthusiast for the scheme, agrees that some of his colleagues have yet to seriously consider the merits of 'prescribing' exercise. 'Despite GPs professing to be holistic doctors and saying they think about the patient within their environment – actually, they don't. They don't understand that exercise is one of the few forms of treatment that will hit several different disease targets all at once. More and more of my patients have five different conditions when they come in to see me – they have diabetes, high blood pressure, obesity, raised cholesterol, *and* they're depressed. By referring them for exercise, you can actually deal with all of those. Plus, you end up with healthier and more engaged patients. But I don't think most GPs are aware of the research on exercise, and too many of them rely on what drug company reps tell them.'

Power reports that GPs often cite lack of time as a factor for not referring – that in a short consultation, there is not sufficient scope for assessing suitability for the scheme and for filling in the required paperwork. However, Professor Bradshaw says it need not take more time: 'It's actually less time-consuming than prescribing, if you're organised. I sit with a dictation machine, and explain that the patient is depressed and has hypertension and wants exercise referral. I ask the patient to sign the form on the way out and my secretary fills in everything else.'

According to Power, the cost of staffing the scheme is approximately £55,000 a year. Given that the leisure facilities are already in place, overheads and other costs are low. Power estimates that the cost of the scheme per client over the 24 weeks period is between £77-137, depending on the number of clients referred and how many of these complete the scheme. This compares favourably with the cost of antidepressants, which have been calculated at £324 over the same time period.[65]

The discounted prices are certainly valued by clients. 'The biggest barrier for me was finance,' says Peter Lawler. 'A health club can cost £70 a month, but here I only pay a nominal fee – if I've got nothing left in my bank account this week, it's not going to stop me doing my fitness.'

The experience of exercise referral (II)

'Using a scheme like this not only improves care for my patients, but it makes them easier for me to deal with. It's good for the patient, and it makes my job more enjoyable, rewarding and more likely to be successful.'

Professor Colin Bradshaw, South Tyneside GP

'The only cost to the GP is psychological, not financial – the cost of changing their practice. They're beginning to see that there are alternatives to writing a prescription, and that it's not their sole responsibility to deal with a person's problem – there are alternatives, and exercise referral is an example of that.'

Paul Bates, Head of Mental Health And Disability Services, South Tyneside Primary Care Trust

'Mental issues reared for me back in 2000, and I attempted suicide. My doctor prescribed medication and cognitive therapy, and while I did get to therapy for a short time, I decided it wasn't my style. I tried various antidepressants, including Prozac, which made me dizzy, gave me tingling in my nether regions and made my eyes go fuzzy. After some sessions with my GP, he suggested this scheme and I thought: "Well, I've got to start doing *something.*" I try to get to the programme twice a week – I'm actually starting to enjoy it. I'm getting back to my normal self, my fitness levels are improving, and my motivation's starting to come back, whereas before I didn't see any point in life.'

Peter Lawler, 47, South Tyneside exercise referral client

'I wouldn't have much faith in medication, but if I wasn't doing this (exercise) I'd probably be going back to my doctor and asking for tablets. If it doesn't work, I'll try something else, but this is such a natural way to do things.'

Jackie Richards, 47, South Tyneside exercise referral client

4.5 Case study two: EXCEL To Health exercise referral scheme, Sefton, Merseyside

The EXCEL To Health exercise referral scheme is managed through Sefton Council, and receives funding from the two local primary care trusts (South Sefton, and Southport and Formby). It also receives contributions from the Single Regeneration Budget and the Neighbourhood Renewal Fund. The scheme has been running for eight years, having initially begun life as a pilot in the Netherton area, and now employs a dozen staff – five full-time referral officers, a development manager, two support officers, plus a number of instructors who lead classes exclusive to scheme participants.

It is a large operation covering Southport, Netherton, Formby, Crosby, Maghaull, Bootle and Litherland, and in the period from July to September 2004 there were 224 referrals.[66] Of these, 59 people were referred primarily for stress, anxiety or depression. Retention rates are high – of those referred in the July-September 2004 period, 74% completed the 14-week programme. The high retention rates may well be due to the close contact kept with clients by scheme staff, as Ian Ashworth, development officer, and the scheme's mental health lead,

explains: 'We'll ring them after their induction to see how they are, and then we'll ring them at weeks 3 and 6, and bring them in for a review during week 7. We'll monitor them again with phone calls in weeks 10 and 13. We didn't use to do the phone calls, but we've found that people love it – they feel better knowing that we're there for them. For some it might be the only phone call they get all week.'

Sean Cahill, the scheme's development manager, agrees: 'The personal connection is very important. You need to engage with people within five minutes of them coming in. Their perception is often that it'll be all gym bods with the latest kit, so they're immediately apprehensive. I say to my officers: "If you need to bring people in three or four times before they even start exercising, that's fine. Some people do come in and give you their life story – if that takes the full hour, then fine. Keep bringing them back until they're comfortable."'
All staff, as well as having sports science qualifications, have been trained in GP referral systems by the Wright Foundation, and they also receive mental health training from within South Sefton PCT and through local mental health charities.

The area is serviced by 56 GP surgeries, all of whom are signed up to the scheme, and all of whom are active in referring patients. Sean Cahill puts this down to the 'increased standards of training, quality, and professionalism within the EXCEL team and the industry as a whole.' He also says the local GP community is close-knit, and that the quality of the scheme has spread 'by word of mouth.' 'It's been vital for us to take the time out to build up a relationship with GPs, to make sure that everything we do is evidence-based. If you don't get the GPs on board, you won't go anywhere.' Under the terms of the 2004 General Medical Services Contract, GPs' participation is incentivised – they receive points for referring to the scheme, which falls under the provision for holistic care.

The list of activities offered to participants is extensive, with more than 350 sessions connected with the scheme running each week. As well as discounted access to facilities at council-run leisure facilities (all activities within the scheme cost £1), partnership with several other agencies enables access to activities as diverse as walking and cycling, yoga, belly-dancing and flower-arranging. Discounted access to some private leisure facilities is made available through a partnership with leisure company Total Fitness.

Wendy Jessop, 38, was interviewed during her eighth week on the scheme. She has been exercising at the Total Fitness gym in Switch Island, after being referred by her GP. She was diagnosed with post-natal depression six years ago, and although she had previously been given medication and a referral to the community mental health team, it was only when she changed doctors in 2004 that she heard of the EXCEL To Health scheme. 'I feel like I didn't get anything from my old doctor,' she says. 'He was polite enough, but I felt like I was imposing on his time. It took two years even to be referred to the mental health team and that was only because I pushed and pushed and said I felt suicidal. Whereas at my new practice I had a medical within two days, I had a proper 20-minute consultation, and they introduced me to EXCEL. I'm going three times a week, at least. Even when I have my off days, when I get there I see other people and they're smiling at me. It makes me feel like I can continue with the day.' Wendy pays £19.50 a month as a reduced membership fee at Total Fitness, and hopes to find a way to continue exercising once she completes the scheme. 'I don't mind paying £19.50, even though I'm on benefits – but the problem will be when it stops in January. I'd like to continue but I just can't afford £40 a month.'

Wayne Vincent, 41, has just completed the scheme, exercising in the gym at Bootle Leisure Centre, and he too would like to find a way to carry on exercising at discounted cost. 'I feel a lot more energetic,' he says. 'Before, I'd turn the alarm clock off before getting out of bed and think "I'll have another hour" – and that hour would turn into two, three, four or five hours. But if I'm going to the gym it gives me something to get up for. And it becomes a pattern – even in the days I wasn't going to the gym, I still found myself getting up earlier. By the end of the scheme I was playing badminton and football as well – and I hadn't played football since I'd been in hospital, a year ago. The more you do, the more you want to do.'

The experience of exercise referral (III)

'The EXCEL scheme is a wonderful thing – I would recommend it to anybody. I thought it would be about losing weight, but it's the other benefits – you're getting out and meeting people, and it stops you sitting at home feeling sorry for yourself. I used to get terrible depressive feelings, but since going to EXCEL I feel a lot better – it's done me the power of good.'

Richard Watts, 60, interviewed on week 13 of the scheme

'When I got diagnosed with post-natal depression, I had no motivation. My doctor didn't look at any alternatives (to medication) – you went in there and it was like "here you are" (a prescription). I saw the CPN for a while but there wasn't enough support – it was only an hour a week, and there were no crèche facilities. I felt like society had let me down. I changed doctors earlier this year, and they introduced me to EXCEL. It's a real positive for me because it's a discipline and it changes your lifestyle. It's given me a new lease of life. There's the social aspect too – it's not just people who are 16, it's people who are 60 who've had strokes or heart problems and we help each other. I wouldn't see anyone otherwise, because I've got a child. I used to feel trapped, whereas now I feel like I get out a bit more. I've reduced my medication, and I think that's got a lot to do with the EXCEL programme. There's a life and a world out there and by going to the gym I'm getting some confidence. It can be fun – and I haven't had fun for years!'

Wendy Jessop, 38, interviewed on week 8 of the scheme

59 Mind (2003) The Hidden Costs Of Mental Health. London: Mind p16.

60 Lawler, D., Keen, S., Neal, R. (1999) Increasing Populations Levels Of Physical Activity Through Primary Care: GPs Knowledge, Attitudes and Self-reported Practice. *Family Practice*, Vol 16 (3), pp250-254.

61 Labour Research Department (as in no 57) p7.

62 Interview with Murdo Wallace, Chairman of The Wright Foundation, October 2004.

63 NHS (as in no 53).

64 Martin Howe Associates (2004) Evaluation Report On South Tyneside's Exercise Referral Scheme.

65 National Institute For Clinical Excellence (as in no 1) p264.

66 All Figures From EXCEL To Health: Usage Figures – July/September 2003-July/September 2004.

5.0 Exercise therapy: alternative approaches

5.1 The Green Gym

One of the most common objections to exercise referral schemes is that people may be put off by the idea of attending leisure centres. Gyms are sometimes perceived as unfriendly places in which there is a subtext of competitiveness ('aren't they full of lycra-clad people with perfect bodies?'). Although those who work in exercise referral are aware of this perception and work to counter it, for some people it may be strong enough to prevent them signing up, even when those schemes, like EXCEL To Health, offer activities based outside the leisure centre setting. It is important therefore to stress that gym-based activity is not the only exercise option for those with mild or moderate depression. Indeed, one such option, the Green Gym, actively subverts gymnasium stereotypes.

The Green Gym concept was developed in the mid-1990s as a partnership between an Oxfordshire GP, Dr William Bird, and the British Trust For Conservation Volunteers (BTCV). The gyms are intended to provide a physical activity alternative for people who may not be attracted to a leisure centre setting. Rather than exercise for its own sake, the work done in Green Gyms also benefits the environment, and can therefore provide a sense of accomplishment to participants that they might not derive from 'working out' in a traditional gym. It has also been mooted that people have a biologically-based attraction to nature ('biophilia') and that being in and connecting to nature can itself provide mental health benefits.[67]

The first Green Gym project opened in 1997 in Sonning Common, Oxfordshire, and there are now more than 60 groups running across the UK. The schemes are supported by the Department of Health, and funded, through BTCV, by a mixture of central and local government (as well as income from industry, charitable and other sources). A typical project involves managing local woodlands, improving footpaths, creating community gardens or enhancing school grounds. Groups meet regularly at least once a week. Each session is led by a BTCV member of staff who is trained in basic exercise physiology, who leads participants in warm up and cool down stretches, and who supervises them in safe exercise techniques. Sessions last for three hours, although participants can attend for a shorter period if they prefer, and are encouraged to work at their own pace. The Green Gyms are free to attend, and open to people of any age, fitness level or ability.

BTCV is keen to promote the schemes to people who experience mental health problems, as well as other socially excluded groups. According to its promotional literature: 'The Green Gym conveys a range of social and mental health benefits. Working with others encourages participation in the local community. Learning a new skill and successfully completing a task builds confidence and self esteem...working out in the fresh air, in contact with nature, relieves stress and anxiety.'[68] BTCV promotes the schemes to GPs, and emphasises that 'health practitioners can recommend the Green Gym to their patients, because of its proven ability in improving fitness, relieving stress and increasing feelings of well-being.' Currently, however, it seems most participants are self-referred.[69]

Green Gym projects have been the subject of two research studies by the School For Health Care Research and Development at Oxford Brookes University. The second of these, an evaluation of the Portslade Green Gym, aimed at determining its impact on psychological health, found that 44% of participants reported moderate or severe impairments in anxiety and depression at the beginning of the study (as measured by the EQ-5D health-related quality of life instrument).[70] It then found that, in the first three months of taking part in the Green Gym, there were significant improvements in mental health component scores of participants (as measured by the SF-12 health-related quality of life instrument) and a strong trend towards decreased depression scores (as measured on the Hospital Anxiety and Depression Scale).[71]

Qualitative research also appears to confirm the mental health benefits of Green Gyms. The Portslade evaluation quotes one participant who lost his job due to depression in 1996 and who had only worked sporadically for four years: 'My GP prescribed antidepressants but I didn't like taking them because of the side effects...I had always enjoyed working outdoors and when I went out with the group I felt really good, also being with people who were very pleasant and like-minded – I found it invigorating. I started really looking forward to the next time I went out. It sustained me through the week.' According to the report, this participant believed the Green Gym helped him regain the confidence to make a satisfactory return to full-time work.[72] Similar sentiments were expressed during interviews with participants for an evaluation of the East Brighton Green Gym project:

'I got very depressed and isolated, and I needed to get out and do something.'

'Physical tiredness is a good feeling, if you've constructed something.'

'It's the combination of being outside, with other people, doing something that is caring for the earth...I feel better about humanity when I'm sharing things...Getting to know people who like doing the same sort of thing, and feeling satisfied at the end of sessions...about what we've done.'[73]

Increased self-efficacy, 'mentally restoratative flow experiences'[74] (i.e. the ability to become pleasurably lost in the activity, distracted from troubles), contact with nature, working with others to create something socially useful and the value of exercise itself were all cited by participants as elements which proved positive to their mental and emotional well-being. There also appears to be a lasting attraction for participants – an examination of attendance records at the Sonning Common project found that that more than 70% of original participants continue to attend sessions two years after its inception.[75]

Participants at the East Brighton project interviewed for this report were similarly positive. Kate Jackson, 64, heard of the Green Gym through the co-ordinator of the project, and has been working on developing a community garden that was donated by a local housing association. After several episodes of depression, Kate had already found that gardening was the most helpful strategy for her. 'I think nature is healing,' she says. 'I did try various antidepressants and I never found them particularly helpful, although I am taking Lithium – reluctantly. The Green Gym is excellent not only because you are doing things outside with other people, but because you're helping the environment. Seeing all the things that are growing helps give a feeling that life is going on and that nature is almost always beautiful. Being with a group that

has a task to do is a motivation that often you can't find on your own – and the feeling at the end that you've achieved something with other people is good. Everybody here knows that people have difficulties sometimes and they are supportive.'

Liz Culshaw, who has joined the gym as part of her rehabilitation from a brain illness which left her subject to mood swings and depressive symptoms, agrees: 'It makes me happy – the people are friendly and we always get on together in the jobs. There's always something for me to learn, and something to show for what we're doing.'

Helen Jones, who co-ordinates the East Brighton Green Gym, is clear that that there is more to the project than offering improved physical health. 'I don't think there's anybody who comes here just for the exercise. My experience is that people have a good time – it's satisfying and creative and you see something for your efforts at the end, rather than just having a sweaty T-shirt. I think that's really important for people suffering from mental health problems, and whose self-esteem is perhaps low – they come out and achieve something and can see what they've achieved. And then there's also the social stuff about people mixing. It's not an institutionalised group – as well as people with mental health difficulties we have retired people, people with learning difficulties, youth offending teams, and mums who fit it in between school hours. We've even got one chap who's self-employed and works at a desk job from home – he likes to come out and do something physical.'

The experience of the Green Gym

'I was a primary school teacher for 10 years before stress at work caused depression, which eventually led to my resignation. My recovery was slow, and I felt tired all the time. I'd put on weight and was quite unfit, so when my wife told me about an advert she'd seen for the Green Gym I thought I might give it a go. I've always liked gardening and practical things, and would rather do that than go jogging or to a gym.

It was a real effort to go along for the first time. My illness makes me worry about going to new places and meeting new people, so even getting to the first session was quite a challenge. However, once I'd got over that hurdle it all became much easier. Jo, the leader, has been great, making us all feel welcome and wanted. It's increased my confidence, as I've proved to myself that I can do things, and I'm also much fitter and have lost weight. We always have a lot of fun, whatever the weather. It's therapeutic being close to nature, and I enjoy the friendship as well as the practical work.'

Participant at the Sandwell Green Gym, near Birmingham[76]

5.2 Self-referrers

Although very few people with depression are referred for exercise by their GPs, this has not prevented many of them discovering its usefulness. They have found, through their own investigation, that exercise could be an important strategy to help manage their condition.

The difference between the views of GPs and the views of people with mental health problems with regard to exercise is striking – our finding that 4% of GPs consider a supervised programme of exercise to be a 'very effective' strategy for patients compares starkly with surveys of people who have experienced mental health problems, which, as previously stated, have found that 50% say exercise helped them to recover, and that 85% of those who had tried exercise found it helpful. Previous work published by the Mental Health Foundation has also highlighted the importance of exercise to many people experiencing mental health problems.[77]

As background research for this report, the Mental Health Foundation interviewed several people who had taken it upon themselves to build exercise into their strategy for managing depression. During these interviews, several themes emerged as to the reasons how and why exercise had come to form part of their recovery strategy.

Firstly, most of the interviewees had become dissatisfied with the forms of treatment they were offered in primary care. Tina Parkes was offered counselling by her GP, but 'although the counsellor was nice, she wasn't that great. After a while she suggested psychotherapy twice a week, and it wasn't a path I was particularly keen on going down.' Geri Matthews 'tried every antidepressant in the book – we still keep trying – and they did nothing, absolutely nothing.' Terry Smith was given Seroxat by her GP and 'I just went into a kind of dissociated state, very sluggish. It certainly didn't have an uplifting effect. It was really through frustration that I started investigating alternative therapies.' And Josie Oliver became physically ill after taking Prozac and Efexor: 'With Prozac I was suddenly sick about seven days after I took it – I just threw up. And with Efexor I got constipation and irritable bowel.'

Secondly, the interviewees felt a desire to take control of their recovery, and saw exercise as a means to do that. 'I wanted to do something that didn't rely on anybody else,' says Tina Parkes. Geri Matthews agrees: 'It's not just the exercise – it's the fact that I have tried to do something to help myself.' 'I'd always been into exercise,' says Terry Smith, 'but hadn't been doing any at all that year. I just decided to get moving and get out of the house…it's about taking responsibility and not being a victim.'

They each have found that exercise gives them a sense of energy or calm. 'When I get depressed I'm inclined to curl up into a ball,' says Geri Matthews, 'but exercise brings me into social contact with people. I do agility with my dogs once a week and walk them every day. There's no doubt it lifts my mood a little immediately afterwards.' Josie Oliver finds that: 'Cycling to work helps wake me up – it makes me more lively, and lively is the opposite of depression', while Lisa Carroll says: 'I find a trip to the gym seems to energise/refresh me… I feel more alert afterwards and able to concentrate on tasks.' And Paula Andrews says: 'Just getting the body moving and getting a rhythm going, and getting into the open space of the countryside gives me a good feeling of well-being…it's like a cleansing process.'

Also, by improving their physical health, exercise helped the self-esteem of the interviewees. 'Weight training helps me feel like I'm strong,' says Josie Oliver. 'And feeling strong helps you feel like you can cope.' According to Terry Smith: 'Part of my depression involved eating a lot, so I had felt out of shape. And doing kickboxing had an element of self-defence to it – I could walk around confidently and not feel vulnerable.'

Finally, exercise reaffirmed their ability to cope, without having to frame and treat their problems in a 'medical' or 'psychological' context. 'I'd had quite a lot of contact with the medical profession,' says Tina Parkes, 'and I'd become quite cynical of the choices – or lack of them. If you go to the gym, nobody knows anything about you – you're not being labelled as the one who is having problems. I also felt I'd proved my counsellor wrong – and that was quite a nice feeling!' Geri Matthews concludes: 'It has so many benefits for your whole life, it would seem ridiculous to me not to do it. And it certainly isn't going to do any harm, whereas the antidepressants seem to a lot of the time.'

67 Reynolds, V. (2002) Well-Being Comes Naturally: An Evaluation of the BTCV Green Gym At Portslade, East Sussex. Oxford Centre For Health Care Research And Development p22.

68 BTCV (2003) BTCV Green Gym (Promotional Brochure). BTCV Publications.

69 Reynolds, V. (as in no 66) p28.

70 Reynolds ,V. (as in no 66) p8.

71 Reynolds, V. (as in no 66) p60.

72 Reynolds, V. (as in no 66) p58.

73 Birch, M. (2003) Cultivating Wildness: Participants' Experience Of The Green Gym (MSc Thesis), University of Brighton p29-34.

74 Birch, M. (as in no 72) p41.

75 Reynolds, V. (as in no 66) p13.

76 BTCV (as in no 67).

77 Mental Health Foundation (1997) Knowing Our Own Minds: A Survey Of How People In Emotional Distress Take Control Of Their Lives London: Mental Health Foundation pp48-9 and Mental Health Foundation (2000) Strategies For Living: A Report Of User-Led Research Into People's Strategies For Living With Mental Distress. London: Mental Health Foundation pp75-80.

6.0 Conclusion

6.1 Conclusion

This report has highlighted multiple reasons for the use of exercise therapy as a first-line treatment for mild or moderate depression in primary care. The increased incidence of depression suggests that we need as many effective ways as possible of helping this patient population, while evidence on the effectiveness and tolerability of antidepressants, and the limited availability of psychotherapy and counselling, indicates the disadvantages attached to more established modes of responding. There is a clear research and evidence base for exercise therapy, and clinical guidelines recognise that it can be an effective treatment response. It is popular with people who have experienced depression, it is cost-effective, and the delivery structures are increasingly present and well-managed. Once established, an exercise regime can be easily sustained beyond the period of treatment, helping to prevent relapse, and it also delivers considerable physical health benefits – of particular use to those with mental health problems who are prone to poor physical health. And the treatment is congruent with existing policies to improve public health, helping to create a holistic and health-focused – as opposed to illness-focused – healthcare service.

Of course, the Mental Health Foundation recognises that exercise therapy will not work for every person with mild or moderate depression – some will not want to exercise, some may be unable, or feel they are unable, and others may be willing but drop out after a period of time. Some may continue to exercise but feel no benefit from it. However, similar problems can be found with other treatments such as antidepressant medication and psychotherapy, and the evidence base suggests that effectiveness for exercise therapy is as high, and continuation rates higher, than for other treatments.

Depression is a complex condition, and there is unlikely to be one single approach that brings about recovery in each case, let alone every case. For this reason, the Mental Health Foundation believes that people with depression are most likely to improve if offered a wide-ranging, individually-tailored care plan. In order to offer such a plan, the choices, for GPs and patients, must be as wide as possible. Furthermore, as a sense of passivity and powerlessness is a symptom (and perhaps a cause) of depression, any means of increasing the options available may itself be therapeutic. This is especially true for exercise, which is by its nature active and non-stigmatising.

Our research has indicated that there is an information-knowledge gap with regard to exercise therapy. Information about its value exists, but many healthcare providers are not aware of, or have not been convinced by, this information. The gap is especially important given the nature of depression – if research on the placebo effect can teach us anything, it is that belief in the effectiveness of a treatment may well form an important part of the success of that treatment. Media attention, medical respectability and pharmaceutical industry marketing muscle has combined to create this belief about antidepressant medication. And while the research shows that exercise is already effective in the treatment of mild or moderate depression, perhaps it could be even more effective if similar kinds of media coverage and marketing strategies were

advanced to create medical respectability for exercise therapy, and to convince more healthcare providers and people with depression of its effectiveness.

Finally, exercise therapy needs to be delivered in such a way that support for the patient is maximised. Embarking on behaviour change is not easy, especially for a population with motivation difficulties, and it is more likely to be successful when that change is reinforced by well-trained specialised staff, able to devote their time and attention to helping people with their programme. Depression is often characterised by a sense of isolation and helplessness, which is countered by the provision of supportive environments in which to recover. Exercise referral schemes enable GPs to hand over some responsibility for the patient, knowing they will be offered levels of care that they, in their role, cannot be expected to offer.

If a treatment works, that is good. If GPs and people with depression believe that it will work, then they become hopeful, and that hope may begin to counteract the depression and that is even better. If a treatment works, people believe that it works, and it is then made available in a structured format to all those who are prepared to try it, then that is best of all, for then effectiveness and hope is accompanied by choice, and expert, ongoing support for that choice.

This report has attempted to bridge the gap between information and knowledge about the effectiveness of exercise, with a view to expanding hope, choice and support for primary care patients presenting with depression. This expansion would give them the best chance of a satisfactory recovery, as well as reducing the time, economic and social burdens of depression on GPs, the NHS, and our society as a whole.

Appendix A: NOP World Health Survey

The results contained in this report are derived from a confidential questionnaire placed by the Mental Health Foundation on NOP World Health's 'GP Net' Service – an online syndicated medical omnibus conducted amongst a nationally representative, quota-based sample of general practitioners. This web-based survey was self-completed by GPs during November 2004. The confidential questionnaire was designed/formatted by NOP World Health in conjunction with the Mental Health Foundation.

Semi-structured questionnaires were set-up on NOP's own server. Email invitations were sent out to a random, 'rolling' sample of approximately 2,000 GPs, all being members of Doctors.net.uk's web community. From this pool of doctors a nationally representative, quota-controlled sample of **200** NHS general practitioners completed the survey online. The sample was quota-based on the doctor's qualifying age (pre-1990 and 1990 onwards) and on 11 regions to ensure a full national distribution. Each doctor who was sent an e-mail invitation had their own unique identification number 'hidden' within the survey URL (which prevents a questionnaire being completed twice and allows for a partly completed questionnaire to be finished at a later date). In addition to this survey PIN each respondent could only access the survey via Doctors.net.uk's (DNUK) website via their own user ID and password as a DNUK member. Thus each participating doctor had to pass through two levels of security in order to complete the survey.

All of the respondents who participated in this survey were GMC listed physicians who were members of Doctors.net.uk, the UK's leading provider of online services exclusively for doctors.

This online survey was self-completed by GPs, all of whom were members of Doctors.net.uk, during the period **19th – 20th November 2004** inclusive.

Q1: When a patient presents with mild or moderate depression, what are your most common treatment responses?

Please select up to a maximum of three treatment responses, where '1' = your most common treatment response, '2' = your second most common treatment response and '3' = your third most common treatment response

	Most common (1)	2nd most common (2)	3rd most common (3)
Prescription of antidepressant medication			
Referral to cognitive behavioural therapy			
Referral to another form of counselling/psychotherapy			
Referral to a supervised programme of exercise			
Referral to alternative/ complementary therapies			
Referral to a dietician			
Other (please specify			

→ Q2

Q2: In general, which do you believe are the most effective strategies for patients presenting with mild or moderate depression?

Please select up to a maximum of three strategies, where '1' = the most effective strategy, '2' = the second most effective strategy and '3' = the third most effective strategy

	Most effective (1)	2nd most effective (2)	3rd most effective (3)
Antidepressant medication			
Cognitive behavioural therapy			
Other form of counselling/psychotherapy			
A supervised programme of exercise			
Alternative/complementary therapies			
Dietary changes			
Other (please specify			

→ Q3

Q3: Which one of the following terms best describes your opinion on the general frequency with which antidepressants are prescribed?

Single answer only

☐ Too often ☐ Appropriately ☐ Too little?

→ Q4

Q4: In general, how effective do you consider the following forms of treatment are for patients with mild or moderate depression?

Single answer for each form of treatment

	Not at all effective	Not very effective	Quite effective	Very effective
Antidepressant medication				
A supervised programme of exercise				

→ Q5

Q5: In general, which one of the following forms of treatment do you believe is more likely to help someone presenting with mild or moderate depression?

Single answer only

☐ Antidepressant medication ☐ A supervised programme of exercise

→ Q6

Q6: According to the scale shown, please indicate your level of agreement for each of the following statements.

Single answer for each statement

	Strongly disagree	Disagree effective	Agree effective	Strongly agree
Antidepressant medications are not as effective as the public thinks they are				
Most patients who are given antidepressants would be as likely to get better if they were unknowingly prescribed a placebo				
Antidepressants are not generally effective as a treatment for mild to moderate depression unless used as part of a wider, individually-tailored care package				

→ Q7

Q7: If other treatment responses to mild or moderate depression (such as cognitive behavioural therapies, other forms of counselling/psychotherapy, exercise referral schemes or complementary therapies) were more available to you, which one of the following statements would best describe how would you prescribe antidepressants?

Single answer only

☐ Less frequently than now

☐ As frequently as now, in addition to increased usage of other treatment responses

☐ As frequently as now – but without increased usage of other treatment responses

☐ More frequently than now

→ Q8

Q8: In the last three years, have you had cause to prescribe an antidepressant despite believing that an alternative treatment might have been more appropriate?

☐ Yes → Q9

☐ No → Q10

Q9: Why did you prescribe antidepressants in this/these case(s)?

Please select all that apply

☐ The patient requested a prescription for an antidepressant

☐ Suitable alternative treatment(s) was/were not available to me

☐ The patient was not willing to try the alternative(s) offered

☐ There was a waiting list for suitable alternative treatment so I prescribed an antidepressant to provide an immediate response in the interim

☐ Other (please specify)

→ Q10

Q10: If you became depressed yourself, which of the following treatment strategies would you most likely use?

Please select up to a maximum of three strategies, where '1' = your first choice strategy, '2' = your second choice strategy and '3' = your third choice strategy.

	1st choice (1)	2nd choice (2)	3rd choice (3)
Antidepressant medication			
Cognitive behavioural therapy			
Other form of counselling/psychotherapy			
A programme of exercise			
Alternative/ complementary therapies			
Dietary changes			
Other (please specify			

→ Q11

Q11: If money were no object, which of the following strategies do you think would be the most useful to implement in order to reduce the incidence of depression amongst primary care patients in the United Kingdom?

Please select up to a maximum of five strategies, where '1' = the most useful strategy, '2' = the second most useful strategy etc

	Most useful (1)	2nd most useful (2)	3rd most useful (3)	4th most useful (4)	5th most useful (5)
Longer consultations					
Greater access to cognitive behavioural therapy					
Greater access to other forms of psychotherapy and counselling					
Greater access to supervised exercise schemes					
Greater access to complementary therapies					

	Most useful (1)	2nd most useful (2)	3rd most useful (3)	4th most useful (4)	5th most useful (5)
Greater investment in improving patients' social supports – (such as in improved housing, greater employment opportunities, reducing poverty)					
Greater investment in public mental health promotion campaigns					
Greater investment in GP mental health training					
Greater investment in research to evaluate and improve antidepressant medication					
Greater investment in research to evaluate and improve non-pharmacological interventions, such as cognitive behavioural therapy, other psychotherapy and counselling, diet, exercise, alternative/complementary therapies)					
Other (please specify)					

→ Q12

Q12: Do you have access to an exercise referral scheme for your patients?

☐ Yes → Q13
☐ No → Q14
☐ Don't know → Q14

Q13: On average, how often, if at all, do you use the exercise referral scheme for patients with mild or moderate depression?

Single answer only

☐ Very frequently → Q16
☐ Fairly frequently → Q16
☐ Not very frequently → Q15a(1)
☐ Never → Q15a(2)

Q14: If an exercise referral scheme were available to you, how often, if at all, would you consider using it for patients with mild or moderate depression?

Single answer only

- ☐ Very frequently → Q16
- ☐ Fairly frequently → Q16
- ☐ Not very frequently → Q15a(1)
- ☐ Never → Q15a(2)

Q15a(1): Why do (would) you not use the exercise referral scheme more frequently for patients with mild or moderate depression?

or

Q15a(2): Why do (would) you never use the exercise referral scheme for your patients with mild or moderate depression?

Please select all that apply

- ☐ I am not convinced that exercise is an effective treatment response for mild or moderate depression
- ☐ I don't/wouldn't have time to add exercise referral to my prescribing repertoire
- ☐ I don't/wouldn't want to be sued if the patient injures him/herself by exercising inappropriately
- ☐ Most of my patients with mild or moderate depression aren't/wouldn't be either able or willing to carry out a programme of exercise
- ☐ Most of my patients with mild or moderate depression expect to be given antidepressants as a treatment response to depression
- ☐ I do not believe that adding exercise referral to my current range of treatment responses would make a significant difference to the well-being of my patients with mild to moderate depression
- ☐ I don't have enough trust in exercise referral schemes to handle my patients safely and effectively
- ☐ It wouldn't occur to me to use an exercise referral scheme for patients with mild to moderate depression
- ☐ The exercise referral scheme to which I have access does not permit me to refer patients with mild to moderate depression
- ☐ Other (please specify)

Notes

the Mental Health Foundation

About the Mental Health Foundation

Founded in 1949, the Mental Health Foundation is the leading UK charity working in mental health and learning disabilities.

We are unique in the way we work. We bring together teams that undertake research, develop services, design training, influence policy, and raise public awareness within one organisation. We are keen to tackle difficult issues and try different approaches, many of them led by service users themselves.

We use our findings to promote survival, recovery and prevention. We do this by working with statutory and voluntary organisations, from GP practices to primary schools. We enable them to provide better help for people with mental health problems or learning disabilities, and to promote mental well-being.

We also work to influence policy, including Government at the highest levels. And we use our knowledge to raise awareness and to help tackle the stigma attached to mental illness and learning disabilities. We reach millions of people every year through our media work, information booklets and online services.

If you would like to find out more about our work, please contact us.

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Published by Mental Health Foundation, **March 2005**

ISBN: 1 903645 670