

Active travel and mental well-being

“Physical activity can play a key role in helping people feel better. It can improve mood and reduce anxiety. It can both prevent and treat mental illness.

The Government’s ‘Choosing Health’ White Paper made a commitment to extend new models of physical health care for people with mental illness across all primary care trusts. It also set out a plan to improve self-care, helping people manage their own mental health problems and making available to them information on both mental and physical wellbeing.

People have much to gain from increasing their physical activity. Physical and mental ill health often occur together, and by improving one you can also improve the other.”

*Professor Louis Appleby,
National Director for Mental Health,
Department of Health*

Introduction

Mental health and well-being are vital to people’s quality of life, and have a profound effect on how well individuals function, both at home and at work. The World Health Organisation defines mental health as a “state of well-being whereby individuals recognise their abilities, are able to cope with

the normal stresses of life, work productively, and make a contribution to their communities.”⁽¹⁾

While the benefits of physical activity for physical health are increasingly understood⁽²⁾⁽³⁾, the benefits for mental health have been less widely reported, and are less well-understood and accepted⁽⁴⁾. However, as research activity in this area grows, the importance of physical activity as both a preventive and a therapeutic measure is becoming better understood and acknowledged. This is reflected in the Chief Medical Officer for England’s 2004 report on physical activity and health:

“Physical activity can be considered both for its preventive and its therapeutic effects on mental illness, and also for its impact on mental health in the general population. Also, the psychological benefits of physical activity are crucial determinants of people’s motivation to be physically active...”⁽⁵⁾

Evidence from the EU suggests that physically active individuals have better mental health than those who are inactive, indicating a positive relationship between physical activity and mental health⁽⁶⁾.

Incorporating active travel into daily life offers an ideal way for people to be regularly physically active.



SCOTTISH EXECUTIVE

healthy living



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Active Travel works with policy-makers and practitioners to promote walking and cycling as health-enhancing physical activity. Sustrans is the UK’s leading sustainable transport charity and works on practical projects to encourage people to walk, cycle and use public transport to benefit health and the environment.

National Cycle Network Centre, 2 Cathedral Square, College Green, Bristol, BS1 5DD

Active travel and mental well-being

The scale of the problem

Mental health problems are already highly prevalent in Britain with at least 1 in 6 people suffering at any one time⁽⁵⁾. There are significant costs associated with mental illness:

- more than five million employees in the UK complain of extreme stress in their jobs and around 13 million days are taken each year in sick leave as a consequence⁽⁷⁾
- over 91 million working days are lost each year due to mental health problems⁽⁷⁾
- the treatment of mental illness in England requires annual NHS expenditure of £3.8 billion (12.7% of total expenditure)⁽⁸⁾
- the treatment of mental illness in England requires personal social services expenditure of £68 million (5.3% of total expenditure)⁽⁸⁾
- in Scotland, NHS boards spent nearly £800 million on mental health services in 2002/03, with councils spending another £52 million⁽⁹⁾
- over 38% of Incapacity Benefit claims are made because of mental conditions⁽¹⁰⁾
- 9% of adults reported currently being treated for any mental illness in the Welsh Health Survey 2003/04⁽¹¹⁾
- NHS Wales spent £429 million on treating mental health problems in 2003-04 (12% of total healthcare expenditure in Wales)⁽¹²⁾.

Mental health and physical activity

There is a range of mental health problems and evidence that these can be ameliorated or even avoided through regular physical activity.

Depression

Depression is a common mental health condition. It is predicted to become the second most prevalent cause of disability worldwide by 2020⁽¹⁾. Mental health conditions can have a negative effect on physical health; for example depression increases the risk of heart disease fourfold⁽¹³⁾. Regular physical activity is associated with a decreased risk of developing clinical depression and has been shown to be effective in reducing clinical symptoms in those diagnosed as severely, moderately or mildly depressed⁽¹⁴⁾. The effect is of the same magnitude as psychotherapeutic interventions⁽¹⁵⁾. Conversely, inactive people are more likely to develop clinically defined depression⁽¹⁶⁾. People with depression who maintain regular physical activity for six months require less medication and are more likely to recover than those relying on drug treatment alone⁽¹⁷⁾. There is also some evidence that physically active older adults (65-79) experience fewer depressive symptoms than those who are inactive⁽¹⁷⁾.

Perception of well-being

There is strong and consistent evidence showing that physical activity makes people feel better about themselves. Becoming physically active causes positive changes in overall physical self-worth as well as specific aspects of physical self-perception such as body image, perceived fitness and strength. This may be particularly important for women, as research shows that compared to men, women tend to be more self-critical of their own body shape, and their body image is more closely linked to overall self esteem⁽¹⁸⁾.

Surveys show that physically active people feel happier and more satisfied with life⁽¹⁹⁾. Higher levels of physical activity are associated with more positive subjective well-being, mood and emotions, life satisfaction and quality of life. There is clear evidence



that physical activity can change people's perceptions of their physical self-worth and identity in a positive way. In particular, physical activity can bring more generalised beneficial changes in self-esteem for those who have initial low self-esteem⁽²⁰⁾.

Weight

Physical activity can reduce obesity and overweight and their associated mental health problems. There is some research to suggest that being overweight during adolescence is associated with depressive symptoms for girls but not boys, and particularly for those in lower grades at school⁽²¹⁾. There is also some evidence that obesity in middle adulthood increases the risk of dementia in later life, independent of any other existing conditions. A 27 year study found that, in comparison to people with normal body mass index, obese people had a 74% greater risk of developing dementia in later life and overweight people had a 35% greater risk⁽²²⁾.

Stress and anxiety

There is unequivocal evidence that physical activity has positive effects on anxiety, and specifically that short bursts of physical activity appear to be sufficient. The most positive effects are noted among those who maintain physical activity programmes over several months⁽¹⁸⁾. Physically active people report fewer symptoms of anxiety or emotional distress than those who are inactive. Physical activity can help people feel less anxious in general, and even single exercise sessions can help individuals feel less anxious. Moderate intensity activity can reduce short-term psychological reactions to psychological stress and can help people recover more quickly⁽²³⁾. Physical activity has some beneficial effects for people with generalised anxiety disorder, phobias, panic attacks and stress disorders. For both 'state anxiety' (acute anxiety, or 'right

now' feelings) and 'trait anxiety' (an anxious predisposition to react nervously), physical activity can have a moderate effect in reducing anxiety.

Sleep

Research in the United States suggests that insomnia may affect approximately a third of the adult UK population and is associated with poor work performance and psychological dysfunction⁽²⁰⁾. Epidemiological evidence demonstrates that daylight exercise is the behaviour most closely related to sleep quality⁽²⁰⁾. Risk of sleep disorders in men and women is significantly lower in those who are regularly active at least once a week, regularly taking part in an exercise programme, and/or walking at a normal pace for more than half a mile a day⁽²⁴⁾. Moreover, people who are regularly active fall asleep faster, and sleep longer and more deeply than inactive individuals⁽⁵⁾. Therefore, being active may be of moderate benefit in improving well-being in the population by improving sleep quality.

Cognitive function

Research suggests that walking is associated with a reduced risk of dementia⁽²⁵⁾. There is also evidence that physical activity helps cognitive performance into old age. Long-term regular physical activity, including walking, has, for example, been associated with significantly better cognitive function and less cognitive decline in older women⁽²⁶⁾. This includes a decreased risk of dementia and Alzheimer's disease⁽²⁷⁾.

Active travel interventions

Projects which promote walking or cycling can have significant benefits for participants' mental health and well-being, as well as the physical benefits.



“We know there are considerable benefits to our mental health from physical activity, particularly walking. Walking helps improve not just our physical health and well-being but also our mental health. It helps us feel good about ourselves, giving us a boost to our confidence and self-esteem. This in turn helps us with our day to day lives and coping well with the challenges we can face and in maintaining and improving our relationships.”

Gregor Henderson,
Director, National Programme for Mental Health and Well-being in Scotland

Walk In to Work Out

Developed in Scotland, Walk in to Work Out is a self-help package of information aimed at the workplace⁽²⁸⁾. A randomised controlled trial in three Glasgow workplaces found that the intervention was effective in increasing walking to work among the intervention group, and that 25% of the intervention group were regularly actively commuting a year later. This group reported increased perceptions of physical and mental health functioning⁽²⁹⁾.

Pedal Back The Years

Launched in 2002 the project aims to deliver guided cycle rides to 1,500 participants in 50 locations across Cornwall over three years.

“I have been suffering from depression for a long time and I need a lot of support in everything I do. On this scheme I have been given all the support and advice to maintain the bike I need, as well as a lot of friendly company on the most enjoyable cycle rides. I find that the exercise, fresh air, company and change of scenery are always helpful with my depression and I’m always glad I’ve made the effort to go along when I’m feeling down.”⁽³⁰⁾

Pedal Back The Years participant

www.pedalbacktheyears.info

Paths to Health

The Paths to Health project supports local walking for health schemes across Scotland. The project is one of the main delivery mechanisms of Scotland’s Physical Activity Strategy and encourages people to incorporate walking into their everyday lives.

“I often walk to work at Dundee University where there is now an Active Travel scheme in place. I find that walking to work gives me more energy for the day ahead and my walk home can be a good way to unwind at the end of a stressful day.”

Linda Hartley, Walk Leader with the Urban Ramblers Project at Dundee University

“Careful encouragement to become more active through walking has formed a special bond amongst the members of my group. This has contributed significantly to the improvement in my mental health and physical well-being generally.”

George McMeechan, walker with Be Active Stay Active in Alloa

www.pathstohealth.org.uk

Hafal Swansea

Hafal Swansea was established in 2001 to help people with severe mental illness and their families work towards recovery. As part of their recovery programme, a group of members cycle regularly along Route 4 of the National Cycle Network along the sea front at Swansea and up the Clyne Valley.

“Since the cycling started people have felt the benefits of regular exercise and improvements in not only their physical health but also their mental health. One member stated “it’s great for relieving stress and forgetting about your worries for a while” another said “I feel a lot fitter and better since I started regular cycling.”

Steve Reynish, Project Manager Hafal Swansea

www.hafal.org/swansea



Walking the way to Health Initiative

Walking the way to Health, an initiative of the British Heart Foundation and the Countryside Agency, aims to improve the health and fitness of more than a million people, especially those who do little exercise or who live in areas of poor health.

"I'm still there after two and a half years and go out every Tuesday in all weathers! I've lost weight, got my confidence back, become involved in lots of projects at the community centre and got to know lots of people... Walking helps you to clear your mind and face your problems. There's always someone out there that will befriend you and that you can talk to."⁽³¹⁾

Walking the way to Health Participant

"I had been unwell with mental health problems for a number of years. Often I didn't get out of bed, I'd put on 7 stone and was very unfit... It [healthy walking group] sounded just the thing for me - like a lifeline, a chance to pull myself up. At first the people who came could walk faster than me. Mentally and physically I found it very hard to start with but I had battled back from 6 breakdowns and knew about hanging on in there. One day in Edinburgh I was feeling very bleak and then I realised that I had just walked around the city, up the Mound and up and down stairs without stopping every few minutes. It hit me like a flash that I had become a lot fitter and stronger and that was a turning point."⁽³¹⁾

Walking the way to Health Participant

www.whi.org.uk

Environmental interventions

While there are many benefits to be gained from individual-focused physical activity promotion programmes, it is also important to provide opportunities to walk and cycle for everyday journeys.

Sustrans believes that changes to the environment, making it easier, safer and more attractive to walk and cycle, can bring about major change in travel choices and significant improvements in physical and mental wellbeing without the need for additional time or commitment by the individual.

The development of the National Cycle Network (NCN) is already making a real contribution to public health. Over 201 million active journeys were made on the NCN in 2004 and more than two thirds of NCN users reported that their local route had encouraged them to become more physically active⁽³²⁾.

Conclusion

Moderate regular physical activity should be considered as a valuable means of treating depression and anxiety, and of improving mental well-being in the population.

There is growing evidence demonstrating that physical activity can be effective in improving mental well-being, largely through improved mood and self-perceptions. There is also good evidence to demonstrate that physical activity is effective as a treatment for clinical depression and anxiety. Therefore, regular physical activity plays a major role in maintaining both mental and physical well being.

Moreover, this adds to the existing evidence that physical activity reduces death and disease from coronary heart disease, stroke, diabetes, obesity, osteoporosis, and some cancers.

Active travel provides an ideal means for achieving the recommended levels of physical activity each week, thus reaping the benefits of improved mental health and well-being.



Further information

Alzheimer Scotland
www.alzscot.org

Alzheimer's Society
www.alzheimers.org.uk

Department of Health
www.dh.gov.uk/mentalhealth

Hafal
www.hafal.org

NHS Health Scotland
www.hebs.scot.nhs.uk/topics/mentalhealth

Mental Health Foundation
www.mentalhealth.org.uk

Mental Health Wales
www.mentalhealthwales.net

Mentality
www.mentality.org.uk

MIND (National Association for Mental Health)
www.mind.org.uk

NIMHE (National Institute for Mental Health in England)
www.nimhe.org.uk

NIMHE Knowledge Community
<http://kc.nimhe.org.uk>

Northern Ireland Association for Mental Health
www.niamh.co.uk

SANE
www.sane.org.uk

Scottish Association for Mental Health
www.samh.org.uk

Scottish Development Centre for Mental Health
www.sdcmh.org.uk

Shift
www.shift.org.uk

The Sainsbury Centre for Mental Health
www.scmh.org.uk

Well? Mental health and well-being in Scotland
www.wellontheweb.org

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Sustrans would like to thank everyone who has contributed photography including its own staff and Julia Bayne, John Ashford, Dave Cuffright, Walking the way to Health Initiative, Inger Budge from 'Walk the Walk' group in Alloa, Fife 'Burns Off Seats' walkers, Health Connect's Walking for Wellbeing' in East Renfrewshire, and Sure Start Palfrey, Walsall.

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