

## Exercise and Schizophrenia

### **Why Exercise is Important for people With Schizophrenia**

In the UK today treatment for schizophrenia focuses on medication in conjunction with talking therapies as being the principal route out of psychosis. However for people living with schizophrenia, whilst psychosis remains a huge threat to their wellbeing, physical illnesses are also now known to be a major cause of ill health and death.

In addition there is now a large body of research evidence that suggests that exercise can help to improve not only your physical health but also your mental and psychological wellbeing.

People with schizophrenia are more likely to suffer from a range of physical health problems such as heart disease, strokes, cancer and diabetes. In fact over 75% of schizophrenia sufferers will also have a chronic physical condition running alongside their mental illness<sup>3</sup> which is one reason why the life expectancy for people suffering with this condition is 10 to 20 years less than that of the general population<sup>7</sup>.

As our information sheet on physical health problems explains not only are people with schizophrenia more likely to suffer from physical illnesses but they will usually experience them at a younger age<sup>3</sup>. The reasons for this high incidence of physical ill health are complex. Part of the problem undoubtedly lies with the lifestyle choices of many people with schizophrenia such as smoking habits (over 70% of people with a serious mental illness smoke compared to about 25% of the general population) and use of street drugs.

Then there is the problem of the side effects of the antipsychotic medication used to treat the positive symptoms of schizophrenia such as hallucinations. But there is also the problem of the sedentary lifestyles and poor diets which most people with schizophrenia adopt and it is here that a good personal exercise regime can make a real difference.

Recent evidence points to the NHS not being very good at helping people with schizophrenia to manage their physical health problems. In an audit of schizophrenia

treatment by the NHS in the UK in 2014 it was found that only about one third of people with a diagnosis of schizophrenia were getting their physical health properly monitored by their GP and in two thirds of cases where problems like abnormal blood sugar levels (which can indicate diabetes) were found nothing was done about it<sup>1</sup>.

The Mental Health Service is not much better in this respect: an editorial in the Lancet (the doctor's journal) highlighted a "worrying" lack of training in physical health issues amongst psychiatrists and psychiatric nurses<sup>10</sup>.

So given the very serious risks to their physical health that people living with schizophrenia face and the gaps in health care provision in this country this is an aspect of recovery from schizophrenia in which the person suffering from the condition needs to take the lead role and to start to become their own "case manager". Fortunately by making some simple changes in our lives better physical health lies within our grasp.

### **Exercise and Weight Gain**

One problem that most people with schizophrenia face is that of weight gain. This has three main causes: poor diet, not enough exercise and the side effects of the antipsychotics. Sometimes the sedentary lifestyle is blamed on the sedative effects of the antipsychotics, however the problem was observed in people with schizophrenia before the first antipsychotics were introduced<sup>2</sup> and in any case the modern second generation of atypical antipsychotics have considerably less sedative effect than the earlier typicals. Most people with schizophrenia in the UK are not in any kind of work and tend to lead lives involving less physical activity than the general population<sup>4</sup>.

However as far as weight gain is concerned the antipsychotics are not entirely off the hook. Research has fairly firmly established a link between the antipsychotics and weight gain suggesting that 40-80% of people with schizophrenia taking antipsychotic medication gain excess weight. The side effects of the antipsychotics should not be underestimated by carers and health workers: weight gain and sexual problems are probably two of the most frequent reasons cited by people with schizophrenia who decide to stop taking their medication<sup>11</sup>.

However not all antipsychotics are as bad in this respect and if weight gain is a problem for you then it may well be worth talking to your doctor about changing to one of the antipsychotics that does not cause such pronounced problems with weight.

There is more about **coping with side effects** on our information sheet.

### **Exercise and Physical Health**

Clearly getting more physical exercise can help to combat the problem of weight gain but what is less well understood is that exercise can help to reduce physical health problems like heart disease and diabetes in itself even if you don't manage to get your weight down. Studies have shown that where people engage in exercise programmes their risk of developing conditions like stroke and diabetes are reduced despite not having lost much weight.<sup>5</sup> In addition exercise can help with problems like osteoporosis (a long term weakening of the bones) that are a problem for some people taking antipsychotics. It also helps keep blood pressure down and improves general levels of physical fitness.<sup>6</sup>

### **Exercise and Symptoms of Schizophrenia**

There have been a number of research studies both in the US and here in the UK that have suggested that exercise can help to improve the negative symptoms of schizophrenia such as apathy, lethargy and social withdrawal and the cognitive symptoms such as poor memory and thinking skills although the evidence for this is somewhat limited and more research is required<sup>5</sup>. However most studies have found an improvement in social interest, behaviour and self esteem in people with schizophrenia when they embark on an exercise programme.<sup>13,17,18,19</sup> The mechanisms for this are rather unclear though as the benefits appear to vary from person to person with some people being more motivated by, for instance, improvements in their physical appearance and others being motivated by the improved opportunity for social interaction<sup>14</sup>.

There has also been some research which has found that exercise can, in some people, help to reduce auditory hallucinations (hearing voices)<sup>9,12</sup>. However it has to be stressed that the evidence for this is extremely limited and it may be that the distraction provided by the activity is the key factor in helping the person to cope with their voices. That said Living with Schizophrenia has been contacted by a number of people who have recommended exercise as a useful coping method. One young woman in the US with schizophrenia found her exercise regime to be extremely useful in reducing the psychiatric symptoms. Here's what Joyce, her mother said:

"We just started this last week but I see the benefits. She is completely focussed for the entire hour."

## **Exercise and Psychological Wellbeing**

There is much stronger evidence however linking exercise with general psychological wellbeing. Getting more exercise will help to reduce stress, improve relaxation and sleep patterns and improve mood. It will also help to improve motivation and self esteem.<sup>6</sup> How this works has been the subject of some debate amongst the researchers. Some have suggested that the benefit comes from changes in the brain's chemistry brought about by increased exercise whilst others have proposed that the change is caused as much by psychological and social factors for instance better social contact involved with say joining a fitness class<sup>8</sup>. It is thought that all types of exercise such as running, swimming and gym work have a similar effect and the more exercise you get the greater the benefit<sup>16</sup>. However over-exercising has been found to have a negative effect as it may increase anxiety levels.

Sleep issues will in particular be of special interest for people with schizophrenia as disrupted sleep and schizophrenia more often than not go hand-in-hand. Doctors are usually ready to help by prescribing sedatives but the importance of getting plenty of exercise (particularly in the open air) is not stressed enough<sup>11</sup>. There is more about coping with **sleep problems** in our information sheet.

Exactly how exercise improves sleep is not yet clear. Some studies have suggested that it may be because exercise reduces anxiety or depression. However others have attributed the benefit to changes in brain chemistry or body temperature<sup>15</sup>.

It has to be said that most of the research that has found exercise to be beneficial for mood and depression has focussed on fairly high intensity physical activities such as running, swimming and weight training. The evidence for the psychological benefits of general activities such as household chores in this respect is decidedly mixed<sup>8</sup>.

Exercise can also help with sexual problems. More physical exercise can help both men and women enjoy better sex lives and helps to reduce erectile dysfunction in men.<sup>5</sup>

## **What Types of Exercise Can You Do?**

There are a number of different types of exercise including running, walking, swimming, weight training etc. Each of these confers different benefits; for instance swimming will improve stamina better than say weight training which in turn is better for bone strength. It is important to do types of physical exercise that you enjoy and are suited to, as you are

more likely than to keep it up. The BHF (British Heart Foundation) have a very useful **calorie counter** on their website which will allow you to compare the effectiveness of different types of exercise for heart health.

Some of the things you should consider when starting exercising are:

- Would you prefer to exercise on your own or in a group with others?
- Would you prefer to design your own exercise programme or would you prefer to have an instructor give you some guidance?
- Do you have any underlying physical problems that may limit the type of exercise you can do?
- What sort of fitness do you want to achieve e.g. if bone strength is important then a gym may be better for you?
- Will you enjoy it? It is important to enjoy what you are doing. If it feels like it is always a struggle then it may be best to try something else.
- What sort of budget do you have?
- What facilities are available locally?

One type of exercise that is often undervalued is general activity such as household chores and looking after the garden. For instance vacuuming the carpets for 20 minutes will burn almost 100 calories and cutting the grass about 150 calories. So don't overlook the importance of this type of exercise and if you are not very good at doing the chores then perhaps now is the time to make a resolution to give them more attention.

Similarly there are lots of other little ways that you can encourage yourself to get more exercise for instance by using the stairs instead of the lift in a building or by getting off the bus one stop earlier and walking the remainder of the journey.

Of course, many people make resolutions to get more exercise only to see their motivation fade after the first couple of sessions. These are some things that can help with that:

- Try to exercise with a friend if possible.
- Make time for an exercise session: don't simply try to fit it in to a busy day.
- Be realistic with your aims: don't be over-ambitious.
- Start off with a fairly modest level and gradually build up as you think you can manage.
- Choose types of activity that will suit you. If going to a gym seems too challenging then

it may not be for you and other options such as walking may be better.

– Try to take some of your exercise out in the open air.

### **How Much Exercise is Best and When?**

The question that often arises is how much exercise should we do? The NHS recommends about 150 minutes or two and a half hours of moderately intense exercise per week for adults. In theory people taking antipsychotics should aim for more than this as they have to offset this additional risk factor.

However for people living with schizophrenia the first problem they will have to overcome is that of motivation. This is of course a problem for all people doing exercise: how many New Year's resolutions to get fit and lose a few pounds have floundered by the end of January? People living with schizophrenia are no different but have a bit more of a challenge with motivation. So perhaps for us it is better to take the view that any exercise is better than none and to try to do as much as we can rather than try to stick to an over-ambitious plan. But if you can go further than that and set some realistic goals then all the better.

As to when is best to exercise: whenever is best for you is the answer. However it is best to avoid intense physical activity in the evening as that may make it more difficult to settle down to a good night's sleep.

### **How to Start Exercising**

If you have not exercised very much before then it would be a good idea to consult with your GP or Community Psychiatric Nurse before you start any sort of exercise programme. It is important to have the reassurance that your chosen exercise method is within your abilities and won't conflict with any pre-existing health conditions. It is also worth doing some homework: the **BHF** website and **NHS Choices** website are very useful here. Try to work up a plan for getting into exercise and base your plan around goals that are not over-ambitious.

In some areas membership of local gyms is available on referral from your GP. You can ask about this at your surgery. The gym membership may be available at low cost or free and there won't be any restrictive contract to sign up to. You will have the benefit of a qualified instructor and the gym will be approved by local health services.

If you are not able to get onto a GP referral scheme in your area then you could think of joining a gym privately using the money provided in your Personal Independence Payment or Disabled Living Allowance. If you do decide to go down this route then beware of signing up to a long term membership contract that will continue to take the subscription out of your bank account for the rest of the year even if you stop attending the gym.

However going to a gym may not suit everyone. It may be that you are not up to the pressure that such a commitment would entail or that you don't feel that the social contact would be good for you right now. If this is the case then "home gym" may be the answer. All you need is a clear space about six feet square and a good book of home exercises. You could also invest in some exercise machinery like an exercise bike or stepper to help you with this. You can buy these on Amazon for about £150.

If you do not feel up to some press ups and push ups in your bedroom then perhaps a bit of walking would be good. This could simply be a ten minute walk around the block or a walk down to the shops once a day. Try to make the walk fairly brisk to get the maximum benefit and don't just amble along. To be effective the walk should be fast enough to increase your breathing rate but not so fast that it would make it difficult to talk to someone at the same time.

If you feel up to more energetic walking you could join a walking group. Your local library will be able to put you in touch with groups in your area or you could try contacting the **Ramblers Association** who have branches all over the country. You can also look up local walking groups on the **Walking for Health** website (in Scotland **Paths for All**).

It is a good idea to try to keep a track of the amount of walking that you are able to fit in and a good way of doing this is to invest in a step pedometer which will measure how far you have walked and how many calories you have burnt during the day. Step pedometers can be bought for around £15 on Amazon, in camping shops like **Blacks** or from the **BHF On-line Shop**.

Swimming is excellent exercise for stamina, flexibility and general fitness. You can find out about your local swimming baths from your library, the local council offices or **Spogo**: the on line sports and fitness finder. If you can't swim yet then you could enquire about classes at your local baths.

There are also local fitness classes run at centres in all areas. You can find out more about these classes by visiting your local library or adult education centre or on the **Keep Fit Association** website.

There is also a very good scheme run by the Conservation Volunteers (TCV) called the **Green Gym** Scheme which involves working on conservation projects in your area. In this way you not only get fit and enjoy the outdoors but you also get to help the environment and make new friends.

Many people have observed this kind of work to be very therapeutic and there is considerable anecdotal material around the benefits of horticultural work as therapy. In the old days when care for people with serious mental illnesses was provided in the large institutional asylums many of these institutions were attached to working farms which provided, not only food for the patients, but also useful occupations for those patients that were up to it. It was often observed by staff that many patient's symptoms were much alleviated when they were working in the farm. However this is an area where research is needed.

## **Diet**

If you are thinking about improving the amount of exercise you are getting then it may be a good time to consider improving your diet as well. Buy a fruit bowl and keep it well stocked. Try snacking on fruit between meals instead of chocolate. Take a look at our advice sheet on **Diet** for ideas about how diet can help your recovery.

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