Specific Educational or Training Programmes and Mental Health

Around the world, some health care providers have researched innovative approaches to helping people with mental illness, in addition to the standard treatment options. Whilst these are mostly not available on the NHS in the UK, knowledge of them may stimulate practitioners to investigate and advocate the principles involved, with a view to pointing clients in fruitful directions. Most of the approaches below can be learnt from a private therapist or self-help sites on the internet .

1. Health education for lifestyle change in long-term mental illness

There is increasing concern in the NHS about the unhealthy lifestyles of many people with psychosis, especially with regard to smoking, lack of exercise and poor diet. A study from Manchester University points out that

"Life expectancy in adults with schizophrenia is reduced by approximately 15 years compared with others in the population. Two thirds of premature deaths result from natural causes triggered by unhealthy lifestyles and the side-effects of antipsychotic medication. There is a need to develop and evaluate health education interventions for people with this diagnosis." Bradshaw (2010) The development and evaluation of a complex health education intervention for adults with a diagnosis of schizophrenia. *Journal of Psychiatric and Mental Health Nursing,* 17(6):473-86.

In recent years there has been more specific awareness of the impact of the significant cardiovascular risk associated with the unhealthy lifestyles and medication of some people with severe and enduring mental illness, due to alcohol and tobacco use as well as sedentariness and obesity. A number of interventions targeting physical health improvement have been researched over the last two decades, including weight management, nutritional education or smoking cessation. Spin-off benefits can include greater socialisation from group participation and improved mood or self-esteem. Examples of studies that found benefit include:

(i) Using a health education programme specifically developed for patients with schizophrenia:

"Participants reported significant increases in their consumption of fruit and vegetables and levels of physical activity….. Results suggest that this model of health education is feasible and acceptable for this population and that it shows promise in supporting health-related behaviour changes."

Bradshaw et al. (2010) The development and evaluation of a complex health education intervention for adults with a diagnosis of schizophrenia. *Journal of Psychiatric and Mental Health Nursing*, 17(6):473-486.

(ii) The two-year follow up review of a large British study using a Well-Being Support Programme found sustained benefits in terms of diet, weight loss, increased physical activity, smoking cessation and improved self-esteem. Smith et al. (2007) A well-being programme in severe mental illness reducing risk for physical ill-health: a post-programme service evaluation at 2 years. *European Psychiatry*, 22: 413–418.

(iii) An American review of a 36-week Wellness Solutions Programme that used biochemical markers of cardiovascular health at 2 year follow-up (e.g. blood glucose and triglycerides), as well as measuring weight and BMI, reported that

"a structured wellness program using a psychoeducational curriculum can be successfully implemented in a large, naturalistic psychiatric setting with unselected, chronically mentally ill inpatients." Lindenmayer et al. (2009) Outcome evaluation of a structured educational wellness program in patients with severe mental illness. *Journal of Clinical Psychiatry,* 70: 1385–1396.

(iv) A useful review that summarises the evidence on several types of lifestyle interventions, including CBT and wellbeing programmes as well as weight management, found that

"Almost all interventions appeared to have some benefit for patients, either towards improving their physical health or their health perception and views." Evangelos Papanastasiou (2012) Interventions for the metabolic syndrome in schizophrenia: a review. *Therapeutic Advances in Endocrinology and Metabolism*, 3(5): 141–162. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3498847/

The majority of studies have looked at secondary care interventions, which have been shown to be more effective than those carried out in primary care, if only because of more rigorous methodology in the relevant studies. Nover & Jackson (2013) Primary care-based educational interventions to decrease risk factors for metabolic syndrome for adults with major psychotic and/or affective disorders: a systematic review. *Systematic reviews*, 2: 116. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3877871/#B19

Whilst the available research has looked only at group programmes instigated by health care providers, the success of a number of different programmes used by significant numbers of patients demonstrates the value of these types of approaches in improving health and longevity and presumably also quality of life. Awareness of the critical need for support for people using similar programmes needs to be more widely disseminated amongst carers and private providers.

2. Relaxation Training

Relaxation training encompasses a variety of approaches, including progressive muscular relaxation (PMR), autogenic training, applied relaxation and meditation. Nowadays, the most well-known of these is mindfulness meditation, which has a section to itself *here.* [provide link] Within the UK health services, progressive muscular relaxation has been the most widely used, and is often paired with cognitive behavioural therapy to achieve relaxation in specific challenging circumstances e.g. in the treatment of phobias.

Anxiety is widespread in many illness populations and the majority of studies looking at psychological interventions for anxiety are not concerned with anxiety disorders of a purely psychiatric nature. From the evidence base available, relaxation training has been shown to be beneficial in the treatment of clinical anxiety disorders in a significant number of studies. Kim &Kim (2018) Effects of Relaxation Therapy on Anxiety Disorders: A Systematic Review and Meta-analysis. *Archives of Psychiatric Nursing*, 32(2):278-284. Relaxation training has been shown to be as effective as CBT in the majority of anxiety conditions, but less so in PTSD or OCD. Montero-Marin (2018) Is cognitive-behavioral therapy more effective than relaxation therapy in the treatment of anxiety disorders? A Meta-analysis. *Psychological Medicine*; 48(9):1427-1436.

In a group of people with OCD, progressive [muscular] relaxation training (PRT) was compared with acceptance and commitment therapy - ACT is a third wave mindfulness-based therapy.
"Clinically significant change in OCD severity occurred more in the ACT condition than PRT (clinical response rates: ACT posttreatment = 46%-56%, follow-up = 46%-66%; PRT posttreatment = 13%-18%, follow-up = 16%-18%). Drop-out rates were low in both groups, but very low with ACT.

Twohig et al (2010) A randomized clinical trial of acceptance and commitment therapy versus progressive relaxation training for obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology*; 78(5):705-716.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2948415/

Applied relaxation training has specific behavioural components, such as engaging in previously avoided feared situations, which give it a different dimension from simple muscular relaxation training. An in depth discussion of the topic is available in an American review. Hayes-Skelton et al. (2013)

A contemporary view of applied relaxation for generalized anxiety disorder. *Cognitive Behavioral Therapy*, 42(4):292-302. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3797858/ A meta-analytic review found that CBT was more effective than applied relaxation in the longer term. Cuijpers et al (2014)Psychological treatment of generalized anxiety disorder: a meta-analysis. *Clinical Psychology Review*, 34(2):130-140.

People with schizophrenia can suffer with high anxiety levels. A review of five studies on the effectiveness of progressive muscle relaxation for people with anxiety associated with acute schizophrenia concluded that "the evidence suggests that PMR was effective …. [and that] PMR may be useful to decrease state anxiety, improve well-being and social functioning in adults diagnosed with schizophrenia."Melo-Dias et al. (2019) Schizophrenia and Progressive Muscle Relaxation - A systematic review of effectiveness. *Heliyon,* 5(4):e01484. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6479115/

Using a different approach but also involving interoceptive awareness (i.e. awareness of the body's state), a small pilot study of ten stable patients with schizophrenia investigated the anxiolytic benefits of a cardiac coherence biofeedback technique (modified HeartMath) that focuses on emotional regulation and increases mindfulness. The authors' rationale was that "studies have already shown that intervention based on interoception, such as decrease in muscle tone (Chu et al. 2009), mindfulness (Davis et al. 2007), and yoga (Vancampfort et al. 2011), are anxiolytic for schizophrenia."
The programme was well accepted and "Results showed that the intervention induced encouraging transformation into emotional and interoceptive outcomes that imply a better quality of life" for people with schizophrenia including reduced state anxiety, although there were several outcome measures that did not change over the 2 month period of the study. Trousselard et al (2016) Cardiac Coherence Training to Reduce Anxiety in Remitted Schizophrenia, a Pilot Study. *Applied Psychophysiology and Biofeedback*, 41: 61–69. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4749648/

More detail about the techniques used and the references referred to can be found in the full report of the study at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4749648/ Information about HeartMath for the general public can be found at the HeartMath Institute's website: https://www.heartmath.org/

Another pilot study looked at the use of relaxation to help people with akathisia, a form of restlessness that can be highly distressing, caused by neurological damage induced by anti-psychotic medication. Results were promising, although patients needed professional support to carry out the programme. Hansen et al (2010) Structured relaxation in the treatment of akathisia: case series. *Neuropsychiatric Diseases and Treatment*; 6:269-271.

Relaxation training was used alongside a dance programme in a group of cognitively impaired elderly people (likely to be pre-dementia). Results showed highly significant improvements in anxiety, depression and cognitive scores when compared with relaxation training alone. Adam et al (2016) Effectiveness of a Combined Dance and Relaxation Intervention on Reducing Anxiety and Depression and Improving Quality of Life among the Cognitively Impaired Elderly. *Sultan Qaboos University Medical Journal*;16(1):e47-53. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4746043/

The authors of a summarising review looking at self-help for anxiety disorders offer the following remarks:
"Anxiety disorders are highly prevalent and are associated with a marked impairment in quality of life and a huge economic cost to society. Unfortunately, a considerable number of people who struggle with anxiety do not seek or receive adequate treatment. This paper offers a critical discussion of their advantages and disadvantages and the evidence for their effectiveness….Self-help treatments have been developed and tested in dozens of studies over almost 40 years. This research has clearly shown that self-help for anxiety disorders is effective, feasible, and acceptable for many patients. Furthermore, self-help interventions may play an important role in providing effective treatment to a large proportion of people suffering from anxiety who are not adequately treated. It is time to start implementing self-help treatment in routine practice… We conclude that guided self-help can play a major role in mental health care for patients with anxiety disorders. However,

several research questions need to be answered before broad-scale dissemination is possible. The Internet will continue to play a prominent role in the further development of this field of research and clinical practice." Cuijpers & Schuurmans (2007) Self-help interventions for anxiety disorders: an overview. *Current Psychiatry Reports*, 9(4):284-290.
https://research.vu.nl/ws/portalfiles/portal/2264981/Cuijpers+Current+Psychiatry+Reports+9%284%29+2007+u.pdf

3. Positive Mental Training.

Positive Mental Training (PosMT) was developed from a Swedish Olympic Sports performance programme and devised by an Edinburgh GP, Dr Alastair Dobbin, and a health psychologist, Dr Sheila Ross. It has been taken up by GP practices within the NHS on an optional basis.http://www.foundationforpositivementalhealth.com

The programme utilises cognitive behavioural approaches, relaxation, mindfulness and visualisation. It involves listening to audio tracks lasting 18 minutes for at least 5 days a week, progressing through a 12 week period. It is obtainable via primary care staff who are trained in it (650 GPs in the UK to date).

The website offers links to outcomes research done with the programme, stating: "*PosMT* is proven to have a positive impact on social and emotional skills, perceptions of self, motivation and resilience."

The use of the programme is also advocated for healthcare staff.

No research has been done that we are aware of looking into PosMT for psychiatric service users, as it is a primary care level tool, but as a self-help programme it can be a resource where there are long waiting lists for secondary care assessment or for therapy for anxiety and depression.

4. Empowerment training

"Research has demonstrated that empowerment among mentally ill people offers life satisfaction……Patient empowerment is a matter of self-determination, hence, it occurs when a patient freely chooses his or her own path to recovery and well-being. It has been concluded that mentally ill people living within the community should not be treated as mere passive objects of medical interventions. Thus, empowerment should be a well-established part of mental health care and the base of psychosocial rehabilitation services." Sakellari (2008) Empowering mentally ill people: A new health promotion challenge?" *International Journal of Caring Sciences*, 1(1):21–25.
https://www.researchgate.net/publication/47374413_Empowering_mentally_ill_people_A_new_health_promotion_challenge

"The impact of empowerment is such that, despite societal stigma, empowered patients acquire positive attitudes about themselves. They have good self-esteem, they believe in themselves and they are optimistic about the future. Furthermore, they believe that they have some power within society and they are interested in changing and promoting community action." Corrigan et al. (1999) The construct validity of empowerment among consumers of mental health services. *Schizophrenia Research*, 38:77–84

A qualitative Finnish study has investigated the value of empowerment training with mental health service users (MHSUs). The authors found that the participants valued the training because it provided social interaction and enhanced learners' internal resources. "The training reinforced their positive internal resources, stimulated their inner mind activity and gave meaning to their lives. ……Empowerment training could be used to strengthen MHSUs' positive internal resources giving them also a possibility to train their cognitive activities."

Nieminen et al. (2016) Mental Health Service Users' Experiences of Training Focused on Empowerment: Training Environment and the Benefits of Training. *Archives of Psychiatric Nursing*, 30(3): 309-315. The abstract is available at
https://www.psychiatricnursing.org/article/S0883-9417(15)00265-4/pdf