Prevention

Prevention of schizophrenia is difficult as there are no reliable markers for the later development of the disorder. There is tentative though inconclusive evidence for the effectiveness of early intervention to prevent schizophrenia in the prodrome phase. There is some evidence that early intervention in those with first-episode psychosis may improve short-term outcomes, but there is little benefit from these measures after five years. Cognitive behavioral therapy may reduce the risk of psychosis in those at high risk after a year and is recommended in this group, by the National Institute for Health and Care Excellence (NICE). Another preventive measure is to avoid drugs that have been associated with development of the disorder, including cannabis, cocaine, and amphetamines.

Antipsychotics are prescribed following a first-episode psychosis, and following remission a preventive maintenance use is continued to avoid relapse. However, it is recognised that some people do recover following a single episode and that long-term use of antipsychotics will not be needed but there is no way of identifying this group.

Psychosocial interventions:

A number of psychosocial interventions that include several types of psychotherapy may be useful in the treatment of schizophrenia such as: family therapy, group therapy, cognitive remediation therapy, cognitive behavioral therapy, and metacognitive training. Skills training, and help with substance use, and weight management– often needed as a side effect of an antipsychotic, are also offered. In the US, interventions for first episode psychosis have been brought together in an overall approach known as coordinated speciality care (CSC) and also includes support for education. In the UK care across all phases is a similar approach that covers many of the treatment guidelines recommended. The aim is to reduce the number of relapses and stays in hospital.

Other support services for education, employment, and housing are usually offered. For people suffering from severe schizophrenia, and discharged from a stay in hospital, these services are often brought together in an integrated approach to offer support in the community away from the hospital setting. In addition to medicine management, housing, and finances, assistance is given for more routine matters such as help with shopping and using public transport. This approach is known as assertive community treatment (ACT) and has been shown to achieve positive results in symptoms, social functioning and quality of life. Another more intense approach is known as intensive care management (ICM). ICM is a stage further than ACT and emphasises support of high intensity in smaller caseloads, (less than twenty). This approach is to provide long-term care in the community. Studies show that ICM improves many of the relevant outcomes including social functioning.

Some studies have shown little evidence for the effectiveness of cognitive behavioral therapy (CBT) in either reducing symptoms or preventing relapse. However, other studies have found that CBT does improve overall psychotic symptoms (when in use with medication) and has been recommended in Canada, but it has been seen here to have no effect on social function, relapse, or quality of life. In the UK it is recommended as an add-on therapy in the treatment of schizophrenia, but is not supported for use in treatment resistant schizophrenia. Arts therapies are seen to improve negative symptoms in some people, and are recommended by NICE in the UK. This approach however, is criticised as having not been well-researched, and arts therapies are not recommended in Australian guidelines for example. Peer support, in which people with personal experience of schizophrenia, provide help to each other, is of unclear benefit.

Psychosocial

Psychotherapy is also widely recommended, though not widely used in the treatment of schizophrenia, due to reimbursement problems or lack of training. As a result, treatment is often confined to psychiatric medication.

Cognitive behavioral therapy (CBT) is used to target specific symptoms and improve related issues such as self-esteem and social functioning. Although the results of early trials were inconclusive as the therapy advanced from its initial applications in the mid-1990s, meta-analytic reviews suggested CBT to be an effective treatment for the psychotic symptoms of schizophrenia. Nonetheless, more recent meta analyses have cast doubt upon the utility of CBT as a treatment for the symptoms of psychosis.

Another approach is cognitive remediation therapy, a technique aimed at remediating the neurocognitive deficits sometimes present in schizophrenia. Based on techniques of neuropsychological rehabilitation, early evidence has shown it to be cognitively effective, resulting in the improvement of previous deficits in psychomotor speed, verbal memory, nonverbal memory, and executive function, such improvements being related to measurable changes in brain activation as measured by fMRI.

Metacognitive training: In view of many empirical findings suggesting deficits of metacognition (thinking about one's thinking, reflecting upon one's cognitive process) in patients with schizophrenia, metacognitive training (MCT) is increasingly adopted as a complementary treatment approach. MCT aims at sharpening the awareness of patients for a variety of cognitive biases (e.g. jumping to conclusions, attributional biases, over-confidence in errors), which are implicated in the formation and maintenance of schizophrenia positive symptoms (especially delusions), and to ultimately replace these biases with functional cognitive strategies.

The training consists of 8 modules and can be obtained cost-free from the internet in 15 languages. Studies confirm the feasibility and lend preliminary support to the efficacy of the intervention. Recently, an individualized format has been developed which combines the metacognitive approach with methods derived from cognitive-behavioral therapy.

Family Therapy or Education, which addresses the whole family system of an individual with a diagnosis of schizophrenia, may be beneficial, at least if the duration of intervention is longer-term. A 2010 Cochrane review concluded that many of the clinical trials that studied the effectiveness of family interventions were poorly designed, and may over estimate the effectiveness of the therapy. High-quality randomized controlled trials in this area are required. Aside from therapy, the impact of schizophrenia on families and the burden on careers has been recognized, with the increasing availability of self-help books on the subject. There is also some evidence for benefits from social skills training, although there have also been significant negative findings. Some studies have explored the possible benefits of music therapy and other creative therapies.

The Soteria model is alternative to inpatient hospitalization using full non professional care and a minimal medication approach.[128] Although evidence is limited, a review found the program equally as effective as treatment with medications but due to the limited evidence did not recommend it as a standard treatment. Training in the detection of subtle facial expressions has been used to improve facial emotional recognition.

Other

Exercise therapy has been shown to improve positive and negative symptoms, cognition, and improve quality of life. Aerobic exercise has been shown to improve cognitive deficits of working memory and attention. Exercise has also been shown to increase the volume of the hippocampus in those with schizophrenia. A decrease in hippocampal volume is one of the factors linked to the development of the disease. However, there still remains the problem of increasing motivation for, and maintaining participation in physical activity. Supervised sessions are recommended. In the UK healthy eating advice is offered alongside exercise programs.

An inadequate diet is often found in schizophrenia, and associated vitamin deficiencies including those of folate, and vitamin D are linked to the risk factors for the development of schizophrenia and for early death including heart disease. Those with schizophrenia possibly have the worst diet of all the mental disorders. Lower levels of folate and vitamin D have been noted as significantly lower in first episode psychosis. The use of supplemental folate is recommended. A zinc deficiency has also been noted. Vitamin B12 is also often deficient and this is linked to worse symptoms. Supplementation with B vitamins has been shown to significantly improve symptoms, and to put in reverse some of the cognitive deficits. It is also suggested that the noted dysfunction in gut microbiota might benefit from the use of probiotics.

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