

## **FAQs about Orchard and the psilocybin crowdfunding campaign**

### **What is Orchard?**

Orchard is a new charity established to accelerate the development of new and better treatments to change the lives of millions of patients suffering from obsessive-compulsive disorder (OCD), a severe mental illness.

### **What is this project about?**

Psilocybin, the active ingredient in magic mushrooms, is a fast-acting anti-depressant. Prof David Nutt and his team at Imperial College are seeking to study its effects on the thinking processes and symptoms of patients with OCD.

### **What is OCD?**

OCD is one of the most debilitating and neglected of mental illnesses. It is common, chronic and often severely disabling. It affects 1.5 million people in the UK alone. It is characterised by intrusive thoughts (obsessions) and accompanying rituals (compulsions) aimed at reducing anxiety and distress. Sixty per cent of OCD patients are also depressed and many are suicidal. The lifetime prevalence of OCD is 3 %. It affects all population groups regardless of gender and culture.

### **What problem is the project addressing?**

Treatment options for OCD are limited. They consist of anti-depressant medications developed primarily for other mental disorders, and cognitive behavioural therapy. Both of these treatments can take weeks or months to start to have any effect, and the medications often have significant side effects. Moreover, up to 40% of patients do not respond and 50% need further treatment. The 2015 report of MQ (a major UK-based mental health charity) identified OCD among the most underfunded mental illnesses even though it is listed by the World Health Organization among the 10 most debilitating conditions globally.

### **How will our project address the need identified?**

There is an urgent unmet need for new treatments for OCD to address the fact that 40% of OCD patients do not respond to existing treatments. There is preliminary research by Moreno et al (2006) from the University of Arizona into the use of psilocybin as an anti-obsessive drug. The research team at Imperial College has already shown that psilocybin may be effective for treatment-resistant depression.

A number of personal case reports have shown that psilocybin can help in the treatment of OCD.

This study is designed to investigate this further. Its aim is to gather enough evidence to inform the development of a much larger efficacy study and, ultimately, approval by the regulators for psilocybin's use in OCD.

This study will use a low dose (10 mg) and an inactive placebo, testing the effect on thinking processes and symptom reduction over time as well as the length of the effect.

The study will be carried out over a period of six months with 16 participants with OCD and no current depression. The study is a single dose experimental feasibility study.

### **Who is Prof David Nutt?**

The chief investigator, Prof David J Nutt, is the Edmond J Safra Professor of Neuropsychopharmacology and director of the Neuropsychopharmacology Unit in the Division of Brain Sciences at Imperial College. He has published over 500 original research papers, a similar number of reviews and books chapters, eight government reports on drugs and 34 books.

### **What will the impact of this project be and how do we plan to assess this?**

OCD is the fourth most common mental disorder after depression, alcohol/substance misuse, and social phobia. The condition typically starts during adolescence, although symptoms can develop at any age. Once the condition has developed, it interferes significantly with the person's life and puts a great social and economic burden on them and their environment.

OCD symptoms can range from mild to severe. Some people with OCD may spend a couple of hours a day engaged in obsessive-compulsive thinking and behaviour; for others the condition can completely take over their lives.

Given the chronic nature of the condition with a significant life-long impact, there is an urgent need to develop new and more effective strategies for prevention, early detection and effective treatment. However, research into OCD is currently significantly underfunded.

### **How much will it cost?**

We need to raise £80,000 to conduct this experimental study at Imperial College. We have raised £30,000 so far. The funding will be used to pay for: the active ingredient (psilocybin), travel of OCD patients to the study site at Imperial College, therapists' time, hire of the clinical trial site, time of the chief investigator, cost of data analysis, and cost of reporting the results.

### **Why are government funders such as the NIHR or the MRC not funding this?**

It's a dual problem: first, OCD gets very little funding (a 2017 report from mental health research charity MQ shows that OCD gets the least funding from all mental health conditions). Only 89p is invested in OCD research per year per OCD patient in the UK. This is because OCD is often misunderstood and trivialised, even by scientists and the medical profession. Second, psychedelics are still stigmatised, which makes it hard to get funding from traditional providers. That's why we set up Orchard – to help research projects that can't find funding from elsewhere.

### **Why is the pharmaceutical industry not doing this?**

Unfortunately, much of the pharmaceutical industry has pulled out of mental health research in the past 10 years. This is because they have found it difficult to identify effective molecular targets in the brain and run successful clinical trials of new treatments. Mental health research is just too risky for most of them. Furthermore, of all the mental health disorders OCD is the most overlooked despite it being so common. That's why we set up Orchard: to help hard-to-fund projects that can't be developed by other means.

### **Can I be a participant in the study?**

Unfortunately, not at this stage, as this is a call for funding not participants. Recruitment for participants will start after the funding is in place.