Module:
Psychological Foundations of Mental Health

Week 5
Cognitive therapy: experimental and clinical evidence

Topic in Action 2
Third wave psychotherapies: from content to process – Part 2 of 2

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Lecture transcript

Slide 3
Mindfulness is unusual among new psychotherapeutic approaches in that it emerged not from foundations in behavioural and cognitive psychology but from the eastern spiritual traditions of Buddhism. Mindfulness is a core principle of this tradition, and meditation is used as a method to help achieve it. Mindful meditation seeks to achieve what is termed a compassionate and lucid awareness. In other words, to have a clear sense of what is happening while at the same time being non-judgmental or critical. Meditation also seeks to promote a sense of awareness and knowing that is based in the moment as it happens.

Slide 4
The core cognitive process of mindfulness is seen as attention but paying attention in a particular way, on purpose, in the moment, and non-judgementally. Mindful meditation is taught as a skill that a person can use at any time, while sitting silently alone in a quiet room but also when eating, when walking, or even when washing the dishes.

Slide 5
Meditation and mindfulness principles and practise were first applied clinically as a programme of Mindfulness-Based Stress Reduction, or MBSR, by Jon Kabat-Zinn in 1979. This is still used in a variety of contexts, especially in the context of physical health conditions such as pain and hypertension where stress reduction can be an important self-management tool. More recently, its potential as a treatment in chronic depression has been explored that we will look at in a moment.

When applied clinically, mindfulness approaches focus on teaching a set of three linked skills. First, to train our attention to be consciously and intentionally aware of things as they are happening in the moment, both things that are happening in our world, in our bodies, and in our minds. Our minds in particular are prone to be elsewhere, whether in the past ruminating on things that have happened or in the future worrying about things that might happen later.

Second, it trains the ability to notice habitual reactions to stressful or aversive events, particularly in our patterns of hot thoughts and repetitive thinking. While this sounds like CBT, the difference with mindfulness is that there is no expectation to challenge or change the thoughts, simply to become passively aware of them as they happen. To treat them as passing thoughts rather than

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actively engage with them.

Finally, it seeks to encourage the development of an attitude that is flexible and curious about the world but in a non-judgmental and non-evaluative way, to be accepting and forgiving both to ourselves and to others. It is evident how such skills might be useful to tackle some of the core cognitive and emotional features of depression and potential vulnerability factors, such as dysfunctional attitudes and rumination.

Slide 6
Mindfulness-based Cognitive Therapy for recurrent depression, or MBCT, was developed by Zindel Segal and two UK psychologists, John Teasdale and Mark Williams. It typically follows a manualised eight-week group treatment programme, plus a number of refresher sessions in the months that follow led by a trained MBCT therapist. Sessions last two hours, and each session is divided into two parts. One that is more experiential, building core and more advanced mindfulness skills as the eight weeks progress, and the second part of each session addressing higher these can be applied, building on the development of a relapse prevention plan by the end. As with all mindfulness approaches, homework is central, with daily meditation practise essential, something that is expected to continue after the course has ended to maintain its benefits.

Slide 7
The largest trial to date is one reported by William Kuyken and colleagues, published in 2015. It took a group of patients with a history of three or more previous depressive episodes who were currently in remission and being maintained on antidepressant medication in an effort to get out or delay further relapse. The study compared this usual care with MBCT and simultaneous support for patients who wanted to gradually reduce their medication. 424 patients took part in the trial and were followed-up for two years to assess whether they had a relapse or recurrence of their depression.

We see the results here and the diagram as a survival curve. This shows the proportion of each group at each time point that had not yet had a relapse or recurrence. Because all were in remission at the start, both the start at 100%. However over time, patients started to develop depression again.

The blue line shows the data for the standard care group. We see that by five months, almost 25% had had a relapse, and by the end of the two-year follow up, half of a recurrence of their depression. The red line shows the results for the group receiving MBCT. Although their medication is gradually reduced, their rate of relapse or remission was substantially less, particularly over the first 10 months. Longer term rates were similar to the control group but still superior, despite the fact that they were taking substantially less antidepressant medication.

Despite the size of the study and these encouraging results, they did not reach the required level of statistical significance. We have no overall difference in the median time to relapse or recurrence. As ever, we need the power of meta analysis to give us a better picture.

Slide 8
A systematic review by Kuyken and colleagues in 2016 considered 10 trials of MBCT since 2010, A significant number in such a short time. More trials have been published since but not included in this analysis. In nine studies, individual patient data was available to permit both a whole trial and individual patient meta analysis based on a total of 1,258 patients. All of the trials address the treatment of patients in remission but with a history of recurrent depression. Relapse or later recurrence was the primary outcome.

All of the participants had had multiple, previous episodes of depression with almost 60% having had five or more. Five of the studies involved an active treatment, including maintenance medication as treatment as usual. Here is the forest plot from all nine studies comparing MBCT

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with no MBCT.

The effect being measured is the risk of relapse over the study period. This is measured by an index called the hazard ratio. This is similar to the relative risk that we looked at earlier in the week. A ratio of less than one means lower risk of relapse in the MBCT treatment condition.

We see that all the hazard ratios are less than one, although in all but two of them, both small studies, the 95% confidence interval crosses the mid-line. However, overall the effect size was significant at 0.69. In other words, the MBCT group was only 69% as likely to relapse as the other conditions as a given point in time. Put the other way, the non-MBCT group were 45% more likely to relapse. A separate analysis of five trials comparing MBCT and maintenance medication, including the Kuyken trial tat we looked at previously, showed an overall benefit of MBCT with a recurrence rate only 77% of that shown in the medication group.

Slide 9
One final result from the analysis came from the individual patient data. They asked the question, does MBCT have a differential effect compared to no MBCT depending on the severity of the depression at baseline? The top line in this plot shows the steady, non-linear increase in relative risk of relapse, with greater levels of baseline depression in the patients who did not receive MBCT. In the MBCT-treated patients, there was also a relationship, but this time it was linear and much weaker. The results suggest that the relative benefits of MBCT in preventing relapse was greater the more severe the patient's depression at the start of treatment.

Slide 10
So we have looked briefly at two promising new approaches that seek to address the specific need of reducing depression relapse where earlier remission was received through medication, through psychotherapy, or had occurred spontaneously. While some, such as MBCT, are accumulating significant amount of RCT evidence, others are only just beginning on this journey. It will take time before we can say which of them is best at achieving the goal of reducing rates of relapse and recurrence. It will probably take even longer to understand the precise mediator's mechanisms of their effectiveness. Future research may show that they share critical features, perhaps as illustrated in the two examples examined by tackling a common maladaptive cognitive process such as rumination.

Slide 11
This brings us to the end of topic 3 and of the week. I hope that you have a good idea now of the complexity involved in developing evidence-based psychotherapies and how this process is one of continuous research and development. We have come a long way from Beck's original cognitive model of depression and the therapy that developed from it. The use of randomised controlled trials has helped us evaluate whether the therapy is effective but has also highlighted the shortcomings, including the fact that many patients fail to respond fully or later relapse even when the techniques of therapy are applied well.

Research into mediators and mechanisms of change can help us focus therapy to make it more effective and identify core features that demand new therapeutic approaches, either as adjuncts to conventional cognitive therapy or which take a radically different approach. We looked just at rumination-focused and mindfulness-based cognitive therapy, but other new wave therapies are being developed and evaluated all the time. Underpinning all of this effort is psychological theory, cognitive, social, and behavioural. There is no evidence-based psychotherapy without basic psychological theory and research and the application of a continual cycle of robust and reliable research methods.

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