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Abstract

**Objective:** We sought to explore how the process between the counsellor and patient for arriving at a case formulation may predict the outcome of manualized interpersonal counselling (IPC) for depression in primary care. **Method:** Qualitative content analysis and applied conversation analysis (CA) were used to achieve depth in the understanding of case formulation process among five patients who recovered and five who were unchanged according to quantitative post-treatment change rates derived from Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM). **Results:** Interaction in the case formulations for the recovered group was generally characterized by a joint construction effort between the counsellor and the patient centred on one problem area. The ability to delimit problems to one area was associated with the patient’s role disputes in social relationships. For the unchanged patients, the case formulation typically reflected unilateral construction of the problem area, and more than one problem area was selected as the focus. The problem areas in the unchanged group were associated with complicated grief or loneliness. **Conclusions:** The process between counsellor and patient of arriving at and agreeing on a case formulation might potentially contribute to recovery, and it deserves greater attention in training counsellors and conducting research.

*Keywords:* case formulation, multiple case study, content analysis, conversation analysis, interpersonal counselling, IPC
Predicting response to interpersonal counselling (IPC) from case formulation: A systematic comparison between recovered and unchanged depressive cases

It has been suggested that manualized interpersonal counselling (IPC) can be an effective first-line treatment for mild to moderate depression (Judd, Piterman, Cockram, McCall, & Weissman, 2001; Klerman et al., 1987; Kontunen, Timonen, Muotka, & Liukkonen, 2016; Menchetti et al., 2014; Weissman et al., 2014). Although the efficacy of IPC is statistically relevant, results may vary considerably at the individual level and little is known as to which processes may account for the efficacy of IPC. The crux of IPC is case formulation, in which the clinician links the patient’s symptoms with interpersonal life events, as this drives the treatment process and becomes its focus. Case formulation has received little specific attention to date, however (Markowitz & Swartz, 2007). We examine here how the process of case formulation during the initial two sessions contributes to the outcome of IPC in the treatment of depression.

“A psychotherapy case formulation is a hypothesis about the causes, precipitants and maintaining influences of a person’s psychological, interpersonal, and behavioural problems” (Eells, 2007a, p. 4). The process of formulation provides an opportunity for a shared understanding of the patient’s difficulties and can offer a way of tailoring treatment to the individual and his or her singular situation that diagnosis alone does not (Eells & Lombart, 2011; Macneil, Hasty, Conus, & Berk, 2012; Sturmey, 2009). Although case formulation models in psychotherapy and counselling share many common features, each is also distinct from the others (Eells, 2007a). IPC case formulation is based on empirical research demonstrating an association between patients’ interpersonal circumstances that appear to be temporally related to the onset of their depression and how complicated bereavement, role disputes, role transitions or interpersonal deficits may predispose patients to depression in these situations (Markowitz & Swartz, 2007).
Steps in IPC case formulation

In its original form, IPC was developed to serve as a simplified version (lasting from three to seven sessions (Weissman & Klerman, 1993)) of interpersonal psychotherapy (IPT) to be administered within primary care. IPT is one of the most empirically validated short-term treatments for diagnosed depression (Cuijpers et al., 2011). It has been tested on different age and target groups, in different treatment settings and against different cultural backgrounds (Markowitz & Weissman, 2012). IPT usually consists of 12-16 sessions (Mufson, Moreau, Dorta, & Weissman, 2004; Weissman, Markowitz, & Klerman, 2000). IPT is designed for use by health professionals who have already achieved proficiency in some form of psychotherapy, whereas IPC is designed for those who lack psychotherapeutic training (Weissman et al., 2000). At the outset, IPC was used with patients who have low levels of depressive symptoms or distress (subsyndromal symptomatic depression), but in recent years it has also been used with patients who have met the criteria for major depressive disorder (Kontunen et al., 2016; Menchetti et al., 2014). As the IPC procedures, although simplified, are derived directly from interpersonal psychotherapy (IPT) (Weissman & Klerman, 1993; Weissman et al., 2000, 2007), the structure of IPT and studies concerning it also deserve to be considered here. The structure of IPC is based on the IPT manual (Klerman, Weissman, Rounsaville, & Chevron, 1984; Weissman et al., 2000), i.e. it is divided into assessment, middle and termination phases, although the treatment can be shorter if the patient had made adequate progress by the sixth session. The structure and time limit of IPC are aspects that have scripts to follow, and it require that the case formulation should emerge no later than the second session. The conduct of IPC case formulation occurs through the following steps (Weissman & Klerman, 1993; Weissman et al. 2014).

Step 1: Clarification of symptoms and diagnosis
Symptom identification is accomplished by having the patient complete a self-report measure such as the Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Then, after reviewing the symptoms, it is important to discuss what depression is. Giving the patient a sick role is also a crucial part of this diagnostic clarification, as this role allows the patient set aside temporarily some activities which seem to be overwhelming or pass certain responsibilities to someone else while recovering. The sick role allows the patient to receive help from others and to cooperate with the counsellor in the process of recovering.

**Step 2: Evaluating interpersonal relationships**

It is important in IPC to find out what was going on in the patient’s social and family life at the time the symptoms began, what may have been the triggers of the symptoms and who are the important people in the patient’s life. The counsellor should conduct a brief “Interpersonal Inventory”, i.e. a review of the people who are involved in the patient’s life. In addition to knowing more about what problematic relationships there may be, this review will also allow a discussion to take place on the emotional support, social companionship, or practical help available to the patient while coping with the depressive episode.

**Step 3: Establishing an interpersonal problem area**

Case formulation should concentrate on current relationships and link the onset of the patient’s mood disorder or distress to one of four foci, i.e. interpersonal problem areas (Markowitz & Swartz, 2007). *Interpersonal role disputes* as a problem area implies conflicts or disagreements within a significant relationship. Here role expectations or values are non-reciprocal and communication problems are serious. *Role transitions* may be normative and developmental (e.g. graduation, becoming a parent, retirement) or else unwished for or unexpected (e.g. divorce, being diagnosed with a severe illness, becoming unemployed). In a role transition the nature of relationships changes. For example, receiving a diagnosis of a
serious illness can involve changes in familial responsibility or treatments that may isolate
the patient from sources of social support. Loss of work often involves ending close
relationships at the workplace and may also complicate other relationships associated with
diminished self-esteem. Complicated grief refers to depressive symptoms that result from
serious difficulties in going through various phases of the normal mourning process
following the death of a significant person in the patient’s life. Interpersonal deficits,
loneliness, isolation or sensitivity is chosen as the focus of treatment when a patient presents
with a long-standing pattern of impoverished social relationships. One (or at most two) of
these problem areas may be labelled and explicitly included in the case formulation which
the therapist and patient together agree to work on before the IPC proceeds to its middle
phase.

**Step 4: Making the interpersonal formulation**

An IPC case formulation is a collaboratively constructed summary of earlier
discussions about the symptoms and their relation to interpersonal events and social
relationships. Deciding which focus will be the most appropriate for the patient involves
identifying options. The choice should be guided by its relevance to the patient’s depression,
its overlap with the time for which the patient has been feeling depressed and the potential
support available to the patient in making a change in the problem area (Law, 2013). The
counsellor must check that the patient agrees on the case formulation if it is expressed in the
counsellor’s own words, as it affirms the therapeutic alliance and underscores the patient’s
active role in the treatment.

**The present study**

Case formulation has been highlighted as central to the IPT approach (Markowitz &
Swartz, 2007), but although case formulations are achieved in and through interaction, there
has been no previous systematic research into the process of IPC or IPT case formulation.
Previous research into other forms of therapy has shown that case formulation is a complex interactional activity (Antaki, Barnes, & Leudar, 2004; Davis, 1986) and this reality may explicate the limited amount of direct evidence linking case formulation with outcome. A new insight into how the process of case formulation is associated with the outcome of the counselling would clarify our picture of IPC and the factors that influence a positive response to counselling.

**Methods**

**Study design**

A systematic case comparison method was chosen for this study (Iwakabe & Gazzola, 2009; Iwakabe & Gazzola, 2014). First, quantitative outcome measures were used to select recovered and unchanged cases. Then, qualitative analyses by multiple judges in each case were used to capture factors associated with different outcomes.

**Setting**

The present sample of patients was drawn from a broader group who were participating in a major outcome study (Kontunen et al., 2016) designed to compare interpersonal counselling (IPC) with interpersonal psychotherapy (IPT). The participants for this broader project (N=40) were recruited from among those seeking treatment at primary care units in the hospital district of East-Savo (population approximately 50 000), Finland. The participants were required to have a diagnosis of major depressive disorder (mild or moderate) assigned by the screening psychiatrist (T.L.). Demographic factors (current age, marital status, educational level and job status) were assessed at the screening visit. The use of antidepressant medication and data concerning continuing or auxiliary psychotherapeutic treatment for depression were assessed one year after the end of the 12-month follow-up by conducting a retrospective review of the medical records of each patient. The protocol was approved by the medical district’s ethical committee, and informed consent was obtained.
from all the patients. The patients’ names quoted in this study are pseudonyms and all the
details of the individual cases are obscured so that the subjects could not be identified.

**Measures and categorization of outcomes**

The quantitative outcome data on the treatments were assessed using the Clinical
Outcome in Routine Evaluation – Outcome Measure (CORE-OM) (Barkham et al., 2001)
and Beck Depression Inventory (BDI) scales (Beck et al., 1961). The BDI is a 21-item self-
report instrument, in which the items are scored on a four-point scale from 0 to 3 and
summed to obtain a total score ranging from 0 to 63. The BDI is one of the most common
self-reported measures of depression, and has been viewed as the gold standard in depression
outcome research. The strength of the CORE-OM lies in the breadth of its coverage of
welfare and psychological health. Its 34 items are designed to assess the level of
psychological distress and the outcome of psychological therapy. The items are scored on a
five-point scale from 0 to 4, ranging from “Not at all” to “Most or all of the time” during the
previous week. Thus higher scores indicate greater distress. The items comprise four
domains: 1) Specific problems (depression, anxiety, physical problems, trauma), 2)
Functioning (general day-to-day functioning, close relationships, social relationships), 3)
Subjective well-being (feelings about oneself and optimism about the future), 4) Risk (risk to
oneself, risk to others). The sum of the total scale is divided by the number of items. We
followed the advice of Leach et al. (2006) and multiplied the CORE-OM points by 10,
yielding a more convenient range of 0-40, because it is easier to perceive and assign
meanings to scores expressed in whole numbers.

The CORE-OM and BDI scoring systems have shown excellent psychometric
properties. Validation of the CORE-OM instrument for the Finnish population has
demonstrated similar results to those found for the UK population: Internal consistency
(Cronbach’s alpha) for the total CORE-OM score was excellent in both clinical (α = 0.94)
and non-clinical (α = 0.91) samples (Honkalampi et al., 2017), and correspondingly, the internal consistency of the BDI-21 was 0.89 in a large nationwide population-based sample in Finland (Elovainio et al., 2009). The CORE-OM and BDI scores also exhibited good internal consistency in the original sample of the current study (N=36) as Cronbach’s alpha varied from 0.90 at baseline to 0.96 at 12 months of follow-up in CORE-OM and from 0.82 to 0.93 in BDI. The Pearson correlation coefficient between CORE-OM and BDI was .70 at baseline and .82 at the 12-month follow-up in this sample.

The method of Jacobson and Truax (1991) was used to examine clinically significant changes, where a significant change means one that is unlikely to be due to simple measurement unreliability. This method includes two steps for evaluating individual recovery. The first step calculates the reliable change index (RCI) which specifies the amount of change a patient must show between the pre- and post-test situations for that change to be larger than that reasonably expected due to measurement error alone. The second step calculates the cut-off value to find a weighted midpoint between the means for a patient and a non-patient population. In the current study, the RCI for CORE-OM was set at 6.1 points and the cut-off value at 10.6. These two steps were used to classify individuals into one of four categories: recovered (the patient has passed the cut-off and the RCI in a positive direction), improved (has passed the RCI in a positive direction but not the cut-off), unchanged (has passed neither criterion), or deteriorated (has passed the RCI in a negative direction).

**Inclusion of patients**

The attrition from admission to the selected subsample is shown in Figure 1. For the present purposes, 10 patients were selected to be integrated into the sample for the current qualitative study: all five cases meeting the criteria for unchanged cases and five recovered cases in terms of their CORE-OM scores using the criteria set out by Jacobson and Truax.
(1991). The selection of five out of the ten recovered cases was made in an attempt to render the two groups comparable in terms of psychological health at baseline but with a different outcome at the end of treatment. The CORE-OM score at baseline should be moderate (not mild), because none of the unchanged patients had a mild baseline score and such a patient would have needed no auxiliary treatment for depression, thus preventing any confounding treatment effect on the outcome. Using these criteria before any qualitative analysis, we found 5 patients who had recovered to serve as counterparts to the unchanged patients.

**Counsellors**

Six psychiatric mental health nurses from primary health care units constituted the sample of counsellors for the study. One nurse treated 3 patients, 2 of whom recovered and 1 remained unchanged, one treated 1 recovered and 1 unchanged patient and one treated 2 recovered patients. The remaining three nurses treated only unchanged patients in this sample. The nurses had received 3 days of theoretical training in IPC and had undergone a supervision period of 40 hours with at least one pilot case before the research began. All the nurses had had at least 10 years of outpatient or in-patient experience with depressed patients.

**Researchers**

The research team was composed of a clinical psychologist and psychotherapist (J.K.), a sociologist and occupational therapist (E.W.), a physician specialized in psychiatry and family therapy (T.L.), a professor specialized in general practice and psychiatry (M.T.) and a professor, psychoanalyst (IPA) and family therapist (J.A.). In terms of biases, all five researchers liked training community therapists in psychosocial treatment skills, although they varied in how comfortable they felt using brief psychotherapies or counselling.