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Is interpersonal counselling (IPC) sufficient treatment for depression in primary care patients? A pilot study comparing IPC and interpersonal psychotherapy (IPT)

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Abstract

Background: Psychotherapeutic treatment is underused in primary care, where even short-term psychotherapy can be perceived as too lengthy and labour-intensive. We tested here for the first time the preliminary efficacy of seven sessions of interpersonal counselling (IPC) by comparison with sixteen sessions of interpersonal psychotherapy (IPT) in regular clinical settings. *Methods:* Patients seeking treatment for the first time who met the DSM-IV criteria for major depressive disorder (MDD, mild/moderate) were randomized to either IPC (n=20) or IPT (n=20). The efficacy of the treatments was assessed using the 34-item Clinical Outcomes in Routine Evaluation (CORE-OM) scale and the Beck Depression Inventory (BDI) scale. *Results:* 90% of the patients completed all the treatment sessions. IPC delivered by psychiatric nurses in primary care proved equally as effective as IPT delivered by psychotherapists/psychologists in secondary care. The pre-treatment to 12-month follow-up within-group effect sizes were large: 1.52 (CORE-OM) and 1.41 (BDI) in the IPC group and 1.58 (CORE-OM) and 1.40 (BDI) in the IPT group. At the 12-month follow-up 59% of the patients in the IPC group and 63% in the IPT group were classified as recovered on the CORE-OM scale, with corresponding remission rates of 61% for both groups on the BDI scale. *Limitations:* The small sample size limited the power to detect differences between the groups and the naturalistic settings may have confounded the results. *Conclusions:* This clinical trial suggests that IPC is an appropriate and even sufficient first-phase intervention for handling previously untreated mild to moderate depression in primary health care.

Keywords: depression; interpersonal counselling; IPC; interpersonal therapy; primary care; CORE-OM

Is Interpersonal Counselling (IPC) Sufficient Treatment for Depression in Primary Care Patients? A pilot study comparing IPC and interpersonal psychotherapy (IPT)

Most psychotherapies in primary care settings, even short-term ones, can be perceived as too lengthy and labour-intensive. Based on 2 systematic reviews and 15 randomized controlled trials involving brief psychotherapy (eight sessions or fewer) for depression, Nieuwsma et al. (2012) concluded that major depressive disorder (MDD) or depressive symptomatology can be efficaciously treated with six to eight such sessions. Practice-based studies in routine service settings have similarly shown short-term psychotherapeutic treatment to be effective, with 40-58% of the patients who completed the treatment recovering (Gyani et al., 2013; Holmqvist et al., 2014; Richards & Borglin 2011, Stulz et al., 2013). Systematic studies of the ideal dosage of short-term psychotherapy for gaining the optimal outcome are rare, however. The Second Sheffield Psychotherapy Project (SPP2) of Shapiro et al. (1995) and the reports of Dekker et al. (2005) and Molenaar et al. (2011) found no overall difference in the reduction of depressive symptoms between courses of 8 or 16 psychotherapy sessions.

Interpersonal counselling (IPC) in its original form was developed to serve as a simplified version of IPT to be administered by non-mental health professionals to treat patients with subsyndromal depression. It is a brief, manualized psychological intervention lasting for six or optionally seven sessions (Weissman & Klerman, 1993).

Although there have been distinctly fewer efficacy studies of IPC than of IPT, it has been shown to have an effect on mild depression at the primary health care level and in hospital settings relative to control groups (Judd et al., 2001; Klerman et al., 1987; Mossey et al., 1996; Neugebauer et al., 2007; Oranta et al., 2010).

Menchetti et al. (2014) recently evaluated the efficacy of IPC as compared with selective serotonin reuptake inhibitors (SSRIs) in 287 depressed primary care patients in Italy. The proportion of patients who achieved remission at 2 months following IPC was 58.7%, significantly higher than with SSRIs (45.1%). IPC was impressively effective for primary care patients experiencing their first depressive episode.

While IPC appears to be an effective approach to the treatment of mild depression as compared with treatment as usual (TAU) or moderate depression compared with antidepressant medication, more research would be required to determine whether IPC is sufficient for treating depression in primary care patients in relation to high-intensity psychotherapy. We conducted this pilot study to assess the efficacy of IPC among patients seeking treatment for mild to moderate depression for the first time by comparing it with IPT in naturalistic clinical settings. Importantly, there has been no research comparing IPC with IPT up to now (Weissman et al., 2007).

Methods

Participants

The participants were recruited between March 2010 and April 2012 from among those seeking treatment at primary care units in the hospital district of East-Savo (population approximately 50 000), Finland. The protocol was approved by the ethical committee of the East-Savo Medical District. The participants were required to have a

diagnosis of major depression assigned by the screening psychiatrist (T.L.) in accordance with the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) and following the Mini International Neuropsychiatric Interview protocol (M.I.N.I interview; Sheehan et al., 1998). The inclusion criterion for age was 18 years. Exclusion criteria were: acute suicidal risk, bipolar disorder, psychosis and psychotic or severe depression. Depressive severity was evaluated with the 10-item, clinician-rated Montgomery–Åsberg Depression Rating Scale (MÅDRS; Montgomery & Åsberg, 1979), and alcohol abuse was screened by means of the Alcohol Use Disorders Identification Test (Audit; Babor et al., 1992). Demographic factors were assessed at the screening visit. The use of antidepressant medication at any phase in the treatment was assessed from the medical case records at the end of the interventions.

Forty-four patients were referred to and screened by a psychiatrist (T.L.), four of whom were excluded: three who failed to meet the inclusion criteria and one who refused screening. No patients refused to participate after having been informed to which treatment they were allocated. The 40 were randomized by the screening psychiatrist (T.L.) after obtaining written consent at the end of the screening visit: 20 patients were assigned to the IPC group and 20 to the parallel IPT group. The original study design had allowed for a total of 60 (30+30) patients to be randomized, but it was decided to terminate the study at the end of April 2012 due to the forthcoming changes in personnel. It was possible to combine the patient's antidepressant medication with IPC/IPT if deemed clinically desirable, the decision to prescribe medication being the responsibility of the treating physician. Eighteen patients in each group (90%)

completed the treatment. One patient (male) attended only the first IPC session and another (female) attended 3 sessions, reporting that they did not need the treatment any longer, while one IPT patient dropped out during the third session because she needed psychiatric in-patient care and another (male) fell developed a somatic illness and was admitted to hospital after the 8th session of IPT.

Interventions

Interpersonal counselling (IPC) was carried out in the five municipal primary care units and the control interpersonal psychotherapy (IPT) interventions at one psychiatric outpatient clinic (in Savonlinna). The recommended number of therapy sessions was set at 6+1 following the structure of IPC as laid down by Judd et al. (2004) and the protocol of Menchetti et al. (2010, 2014). It was recommended that the sessions should last 45 minutes (not the original 30 min.). The purposes of the visits were outlined in a 30-page session-by-session checklist based on the descriptions by Weissman & Klerman (1993) and Judd et al. (2004) of the structure of IPC. The aim of the first session was to establish rapport, determine the presence of depression and introduce IPC. In the second session the nurse explored the patient's current interpersonal and social situation and suggested a relationship between the patient's symptoms of distress and current life stress, focusing on one IPT problem area (grief, interpersonal disputes, role transitions, or interpersonal sensitivity). In the middle phase (sessions 3-5) the nurse helped the patient deal more positively with the identified problem area, and the last two sessions addressed the termination of the IPC relationship by reviewing developments over the course of treatment and the patient's current state. It was also possible for the nurses to give the patients homework sheets for intervening work between the sessions in order to

accelerate the process of change in each problem area (Weissman & Klerman, 1993, Weissman 1995a, 1995b). Maintenance sessions were recommended if the patient's problems required them, but only after a new contract had been negotiated.

Eight psychiatric nurses from the primary health care units received 3 days of theoretical training in IPC and underwent a supervision period of 40 hours with at least one pilot case before the research began. All the nurses had at least 10 years of outpatient or in-patient experience with depressed patients. The first author (J.K.) served as the IPC trainer and supervisor, and supervision according to a group format continued monthly during the research.

The control regimen for IPC was an empirically validated high-intensity treatment modality, interpersonal psychotherapy (IPT) (Cuijpers et al., 2011; Markowitz & Weissman, 2012). In order to assess the benefits of a therapy method, one should design the control therapy so that it is similar in all other respects (e.g. the frequency and length of the sessions, clinical supervision of therapists and patients, and equal opportunities to address the major problems). This means that in a well-organized study the control group should contain the general and essential elements of treatment (Baskin et al. 2003, Wampold et al. 2011). The control treatment (IPT) was delivered by two registered psychotherapists and two licensed psychologists. All of them had been treating depressed patients for over fifteen years and had practiced IPT with more than five patients before the research began. Their training material in Finnish (Kontunen et al., 2007) was based on the Comprehensive Guide to IPT (Weissman et al., 2000) and additional literature on IPT (Hinrichsen & Clougherty 2006; Klerman et al., 1984; Mufson et al., 2004; Weissman et al., 2007).

Adherence to the treatment protocol was ensured in both groups by using session-by-session checklists, audiotaping all treatment sessions and discussing the treatment protocols in regular supervision groups. Session-by-session progress or possible deterioration was monitored during the trial with CORE-5 (Wright et al., 2009). Any complaints or severe side-effects were discussed in regular supervision groups with the therapists and by asking patients directly about possible problems related to their treatment or the trial in a follow-up interview conducted by one of the researchers (J.K. or T.L).

Baseline assessments and outcome measures

Our primary measure of efficacy was the Clinical Outcomes in Routine Evaluation, Outcome Measure (CORE-OM; Barkham et al., 2001; Evans et al., 2002), the strength of which lies in its coverage of a broad range of issues in welfare and psychological health. We followed the advice of Leach et al. (2006) to multiply 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. Beside CORE-OM, the Beck Depression Inventory (BDI; Beck et al., 1961) was used as a secondary outcome measure. Both assessments were performed at the beginning and end of the intervention and repeated 6 and 12 months after the beginning of the intervention.

Statistical analysis

The data were first analysed descriptively to check baseline range and distribution of each of the demographic and clinical variables in both groups. The demographic variables were then compared between the patients assigned to IPC and IPT using t-tests for continuous data and χ^2 analyses for categorical data.

Differences in the changes brought about by IPC and IPT were analysed using hierarchical linear modelling (HLM) with Mplus version 7 (Muthén & Muthén, 1998-2012). A full-information approach was adopted in the estimations, yielding standard errors that are robust in the case of a non-normal distribution. The Wald test was used for testing differences in changes between the groups and for testing changes in the IPC and IPT groups separately.

The reliability and clinical significance of the changes were assessed with the criteria set out by Jacobson and Truax (1991) the strengths of which are that it considers change at the individual patient level and is especially useful for small-sample studies in which group variance may mask the individual changes. Lambert and Ogles (2009) recommend using this clinically significant method whenever possible in psychotherapy outcome research. The method comprises two steps for evaluating individual recovery. The first step calculates the reliable change index (RCI) from a function of the remainder of the post-pre -test, the initial standard deviation of the measure and its reliability:

$$RCI = \frac{(SCL_{post} - SCL_{pre})}{\sqrt{2S_E^2}}, \text{ in which } S_E = SD\sqrt{1 - reliability},$$

and the second calculates the cut-off C value to find a weighted midpoint between the means for a patient and a non-patient population:

$$Cutoff\ C = \frac{(SD_{patient}M_{nonpatient}) + (SD_{nonpatient}M_{patient})}{(SD_{patient} + SD_{nonpatient})}.$$

These two steps are used to classify individuals into one of four categories: 1) recovered (the patient has passed the cut-off and the RCI in a positive direction), 2)

improved (the patient has passed the RCI in a positive direction but not the cut-off), 3) unchanged (has passed neither criterion), or deteriorated (has passed the RCI in a negative direction). Those patients, whose baseline scores were under the cut-off C value were not categorized in this way. The results quoted by Connell et al. (2007) for a non-patient population were used when calculating the RCI and cut-off for CORE-OM.

Results

As shown in Table 1, the IPC and IPT groups were comparable in terms of age, sex, educational level, and marital status. Most of the patients were female and were married or cohabiting. The mean age of the sample was 38 years. The patients in the IPT group received more antidepressant medication ($n=14$) than the IPC cases ($n=9$), but the difference was not significant ($p=0.20$). Altogether 12 of the IPC patients were diagnosed as having recurrent depression, as compared with 10 IPT patients ($p=0.52$). Treatment completion rates did not differ between the groups, nor were there any significant differences in baseline demographic or clinical characteristics between the 36 completers and the 4 non-completers, although the material offered little power for finding such differences.

Our primary measure of efficacy, the Clinical Outcomes in Routine Evaluation (CORE-OM) scores correlated closely with the Beck Depression Inventory (BDI) findings, the Pearson correlation coefficient between CORE-OM and BDI being .70 at baseline and .82 at 12 months of follow-up. The CORE-OM scores also exhibited good internal consistency in this sample, as Cronbach's alpha varied from 0.90 at baseline to 0.96 at 12 months of follow-up.

There were no statistically significant differences in the changes in clinical outcome measures between the treatment groups, as confirmed using hierarchical linear modelling with Mplus (Muthén & Muthén 1998-2012) (see Table 2). Both groups benefitted from the treatments, and there were large and highly significant differences between the initial and final scores on all the scales. Within-group effect sizes for CORE-OM from baseline to 12 months of follow-up were $d=1.516$, 95% CI (0.788, 2.244) in the IPC group and $d=1.575$, 95% CI (0.866, 2.285) in the IPT group while those for BDI were $d=1.414$, 95% CI (0.584, 2.244) in the IPC group and $d=1.397$, 95% CI (0.627, 2.168) in the IPT group. No complaints related to the treatment or the trial were expressed and no severe side-effects were recorded.

In the method of Jacobson & Truax (1991) used to examine clinically significant changes, clinical significance was defined as showing reliable improvement and reaching the specific cut-off score of 10.60 or below on CORE-OM defined for the purposes of this work, thus being considered to have recovered. Three of the 36 completers (1 in the IPC group and 2 in the IPT group) had started with pre-treatment scores on CORE-OM below 10.60 points, and they were not divided into recovered or improved cases, although their scores had decreased. Overall, 59% (10/17) of the IPC patients and 63% (10/16) of the IPT patients had recovered by the time of the 12 months follow-up. No significant differences were found between the groups ($\chi^2 1.924$, df 2 $p=0.382$). A detailed comparison of the patients' outcomes in terms of the differences between the pre-therapy and post-therapy (12-month follow-up) CORE-OM scores are shown in the scatter plot in Figure 1. The remission rate, defined as the absence of depressive symptoms or the presence of minimal depressive symptoms (score < 10) and

a 50% reduction in BDI scores from the baseline, was 61% (11/18) in both groups, IPC and IPT.

Discussion

To our knowledge, this is the first comparison of interpersonal counselling (IPC) and interpersonal psychotherapy (IPT) to be published. The results of this preliminary study show that both IPC and IPT are helpful for previously untreated primary care patients with mild to moderate major depression. The remission rate for the IPC group in BDI, 61%, was approximately the same as in the earlier, shorter follow-up study of Menchetti et al. (2014), in which the proportion of depressed primary care patients who achieved remission on the Hamilton Rating Scale for Depression (HRSD, 21-item) after two months of IPC was 59%. Comparison of the results with those of practice-based studies in routine service settings is more complicated, because the recovery rates depend upon how the sample is chosen (Barkham et al., 2012). However, the present outcome results exceeded those of the selected completers' group in practice-based studies, where 40-58% had recovered (Richards & Borglin 2011, Gyani et al., 2013, Holmqvist et al., 2014).

In order to interpret these results, however, we have to acknowledge a number of limitations. The main one was the small sample size, which limited our power for detecting differences between the groups. Also, the naturalistic setting was not exclusively a strength of this study, as the differences in detail, including prescribed pharmacotherapy, could potentially have had differing effects on the outcome. Likewise the recruitment procedure may have restricted the sample to more motivated and psychotherapy-oriented patients. The general practitioners and nurses who referred

patients for an assessment interview may have done a certain measure of preliminary selection, because only four patients were excluded and 90% of those accepted completed the treatment and attended the post-therapy interview.

IPC delivered by psychiatric nurses in primary care proved equally as effective as IPT delivered by psychotherapists and psychologists in secondary care. This result validates the conclusion reached by Nieuwsma et al. (2012) that major depressive disorder (MDD) or depressive symptomatology can be efficaciously treated with six to eight sessions and access to non-pharmacological treatments for depression could be improved by training nurses to deliver structured psychotherapy or counselling. We take IPC to be a good additional tool for nurses treating depression. Our impression is that both patients and nurses accept IPC and its structured techniques, but the review of symptoms, the interpersonal inventory and the formulation of the problem in the two initial sessions is very challenging. Although the treatment method requires learning the IPC structure, it is also essential to emphasize the nuances of a therapeutic relationship in training and to support the nurses through supervision.

We hope that a further comparison between IPC and IPT can be made in the future with a larger sample size and better control over possible confounding variables. Apart from statistical research, additional value could be gained from investigating the therapeutic process itself, examining both therapeutic processes applied to a number of patients and also individual cases (cf. McLeod, 2013). In these ways we might be better placed to find answers to the question of what factors regarding the content or other aspects of counselling affect the achievement of a satisfactory outcome.

- American Psychiatric Association, 1994. Diagnostic and statistical manual of mental disorders, fourth ed., Washington, DC.
- Babor, T. F., de la Fuente, J. R., Saunders, J., Grant, M., 1992. The Alcohol Use Disorders Identification Test: Guidelines for use in primary health care. WHO Publication No. 92.4. World Health Organization, Geneva.
- Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., Evans, C., Benson, L., Connell, J., Audin, K., McGrath, G., 2001. Service profiling and outcomes benchmarking using the CORE-OM: toward practice-based evidence in the psychological therapies. *Clinical Outcomes in Routine Evaluation-Outcome Measures. J. Consult. Clin. Psychol.* 69, 184–196. doi:10.1037/0022-006X.69.2.184
- Barkham, M., Stiles, W.B., Connell, J., Mellor-Clark, J., 2012. Psychological treatment outcomes in routine NHS services: What do we mean by treatment effectiveness? *Psychol. Psychother. Theory, Res. Pract.* 85, 1–16. doi:10.1111/j.2044-8341.2011.02019.x
- Baskin, T.W., Tierney, S.C., Minami, T., Wampold, B.E., 2003. Establishing specificity in psychotherapy: a meta-analysis of structural equivalence of placebo controls. *J. Consult. Clin. Psychol.* 71, 973–979. doi:10.1037/0022-006X.71.6.973
- Beck, A. T., Ward, C. H., Mendelson, M., Mock J., Erbaugh J., 1961. An Inventory for Measuring Depression. *Archives of General Psychiatry* 4, 561-571.
- Connell, J., Barkham, M., Stiles, W.B., Twigg, E., Singleton, N., Evans, O., Miles, J.N. V, 2007. Distribution of CORE-OM scores in a general population, clinical cut-off points and comparison with the CIS-R. *Br. J. Psychiatry* 190, 69–74. doi:10.1192/bjp.bp.105.017657
- Cuijpers, P., Geraedts, A., van Oppen, P., Andersson, G., Markowitz, J. C. & van Straten, A., 2011. Interpersonal psychotherapy for depression: a meta-analysis. *Am. J. Psychiatry* 168, 581–592. doi:10.1176/appi.ajp.2010.10101411.Interpersonal
- Dekker, J., Molenaar, P.J., Kool, S., Van Aalst, G., Peen, J., de Jonghe, F., 2005. Dose-effect relations in time-limited combined psycho-pharmacological treatment for depression. *Psychol. Med.* 35, 47–58. doi:10.1017/S0033291704002685
- Evans, C., Connell, J., Barkham, M., Margison, F., McGrath, G., Mellor-Clark, J., Audin, K., 2002. Towards a standardised brief outcome measure: Psychometric properties and utility of the CORE-OM. *Br. J. Psychiatry* 180, 51–60. doi:10.1192/bjp.180.1.51

- Gyani, A., Shafran, R., Layard, R., Clark, D.M., 2013. Enhancing recovery rates: Lessons from year one of IAPT. *Behav. Res. Ther.* 51, 597–606. doi:10.1016/j.brat.2013.06.004
- Hinrichsen, A., Clougherty, K., 2006. *Interpersonal Psychotherapy for Depressed Older Adults*. American psychological Association, Washington DC.
- Holmqvist, R., Ström, T., Foldemo, A., 2014. The effects of psychological treatment in primary care in Sweden-A practice-based study. *Nord. J. Psychiatry* 68, 204–12. doi:10.3109/08039488.2013.797023
- Jacobson, N.S., Truax, P., 1991. Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *J. Consult. Clin. Psychol.* 59, 12–19. doi:10.1037/0022-006X.59.1.12
- Judd, F.K., Piterman, L., Cockram, a. M., McCall, L., Weissman, M.M., 2001. A comparative study of venlafaxine with a focused education and psychotherapy program versus venlafaxine alone in the treatment of depression in general practice. *Hum. Psychopharmacol.* 16, 423–428. doi:10.1002/hup.311
- Judd, F., Weissman, M., Davis, J., Hodgins, G., Piterman, L., 2004. Interpersonal counselling in general practice. *Aust. Fam. Physician* 33, 332–337.
- Klerman, G. L., Weissman, M. M., Rounsaville, B., Chevron, E., 1984. *Interpersonal Psychotherapy of Depression*. Basic Books, New York.
- Klerman, G. L., Budman, S., Berwick, D., Weissman, M., Damico-White, J., Demby, A., & Feldstein, M., 1987. Efficacy of a brief psychosocial intervention for symptoms of stress and distress among patients in primary care. *Medical Care*, 25, 1078-1088.
- Kontunen, J., Karlsson, H., & Larmo, A., 2007. *Interpersoonallinen psykoterapia. Depression fokusoitu hoitomenetelmä*. Edita, Helsinki.
- Lambert, M.J., Ogles, B.M., 2009. Using clinical significance in psychotherapy outcome research: the need for a common procedure and validity data. *Psychother. Res.* 19, 493–501. doi:10.1080/10503300902849483
- Leach, C., Lucock, M., Barkham, M., Stiles, W.B., Noble, R., Iveson, S., 2006. Transforming between Beck Depression Inventory and CORE-OM scores in routine clinical practice. *Br. J. Clin. Psychol.* 45, 153–166. doi:10.1348/014466505X35335
- Markowitz, J.C., Weissman, M.M., 2012. Interpersonal Psychotherapy: Past, Present and Future. *Clin. Psychol. Psychother.* 19, 99–105. doi:10.1002/cpp.1774

- McLeod, J., 2013. Increasing the Rigor of Case Study Evidence in Therapy Research. *Pragmatic Case Studies in Psychotherapy*, 9, 382-402.
<http://pcsp.libraries.rutgers.edu>.
- Menchetti, M., Bortolotti, B., Rucci, P., Scocco, P., Bombi, A., Berardi, D., 2010. Depression in primary care: interpersonal counseling vs selective serotonin reuptake inhibitors. The DEPICS Study. A multicenter randomized controlled trial. Rationale and design. *BMC Psychiatry* 10, 97. doi:10.1186/1471-244X-10-97
- Menchetti, M., Rucci, P., Bortolotti, B., Bombi, A., Scocco, P., Kraemer, H.C., Berardi, D., Luciano, C., Lia, L., Manganaro, D., Magnani, M., Nespeca, C., Succu, M., Bellino, S., Bogetto, F., Zizza, M., Colombini, N., Rigatelli, M., Simoni, E., Tedeschin, E., Baranzini, F., Bortolaso, P., Callegari, C., Diurni, G.C.M., Vender, S., Martinelli, V., Politi, P., Sciarini, P., Piselli, M., Quartesan, R., Bellomo, A., De Salvia, M., Ferretti, M., Iuso, S., Petito, A., Affatati, V., Todarello, O., Carpinello, B., Contu, C., Pinna, F., 2014. Moderators of remission with interpersonal counselling or drug treatment in primary care patients with depression: Randomised controlled trial. *Br. J. Psychiatry* 204, 144–150.
doi:10.1192/bjp.bp.112.122663
- Molenaar, P.J., Boom, Y., Peen, J., Schoevers, R. a, Van, R., Dekker, J.J., 2011. Is there a dose-effect relationship between the number of psychotherapy sessions and improvement of social functioning? *Br. J. Clin. Psychol.* 50, 268–282.
doi:10.1348/014466510X516975
- Montgomery, S. A., Åsberg, M. A., 1979. A new depression scale to be sensitive to change. *British Journal of Psychiatry*, 134, 382-389. DOI: 10.1192/bjp.134.4.382
- Mossey, J.M., Knott, K. a, Higgins, M., Talerico, K., 1996. Effectiveness of a psychosocial intervention, interpersonal counseling, for subdysthymic depression in medically ill elderly. *J. Gerontol. A. Biol. Sci. Med. Sci.* 51, M172–M178.
- Mufson, L., Moreau, D, Dorta, K., & Weissman, M., 2004. *Interpersonal Psychotherapy for Depressed Adolescents*. The Guilford Press, New York, London.
- Muthén, L.K., & Muthén, B.O., 1998-2012. *Mplus User's Guide*. Seventh Edition. Muthén & Muthén, Los Angeles, CA.
- Neugebauer, R., Kline, J., Bleiberg, K., Baxi, L., Markowitz, J. C., Rosing, M., Levin, B., & Keith, J., 2007. Preliminary open trial of interpersonal counseling for subsyndromal depression following miscarriage. *Depression and Anxiety*, 24, 219-222.
- Nieuwsma, J. A., Trivedi, R. B., Mcduffie, J., Kronish, I., Benjamin, D., & Williams, J. W., 2012. Brief psychotherapy for depression: A systematic review and meta-analysis. *International Journal of Psychiatry in Medicine*, 43, 129-51.

- Oranta, O., Luutonen, S., Salokangas, R.K.R., Vahlberg, T., Leino-Kilpi, H., 2010. The outcomes of interpersonal counselling on depressive symptoms and distress after myocardial infarction. *Nord. J. Psychiatry* 64, 78–86. doi:10.3109/08039480903402227
- Richards, D. a., Borglin, G., 2011. Implementation of psychological therapies for anxiety and depression in routine practice: Two year prospective cohort study. *J. Affect. Disord.* 133, 51–60. doi:10.1016/j.jad.2011.03.024
- Shapiro, D. a, Barkham, M., Rees, a, Hardy, G.E., Reynolds, S., Startup, M., 1995. Effects of treatment duration and severity of depression on the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy. *J. Consult. Clin. Psychol.* 62, 522–534. doi:10.1037/0022-006X.63.3.378
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., & Dunbar, G. C., 1998. The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry, Supplement*, 20, 22-33.
- Stulz, N., Lutz, W., Kopta, S.M., Minami, T., Saunders, S.M., 2013. Dose-effect relationship in routine outpatient psychotherapy: does treatment duration matter? *J. Couns. Psychol.* 60, 593–600. doi:10.1037/a0033589
- Wampold, B.E., Budge, S.L., Laska, K.M., del Re, a. C., Baardseth, T.P., Fluckiger, C., Minami, T., Kivlighan, D.M., Gunn, W., 2011. Evidence-based treatments for depression and anxiety versus treatment-as-usual: A meta-analysis of direct comparisons. *Clin. Psychol. Rev.* 31, 1304–1312. doi:10.1016/j.cpr.2011.07.012
- Weissman, M., Klerman, G., 1993. Interpersonal Counseling for Stress and Distress in Primary Care Settings, in Klerman, G. L., Weissman, M. M. (Eds.), *New Applications of Interpersonal Psychotherapy* American psychiatric Press, Washington D.C., pp. 295-318.
- Weissman, M., 1995a. Mastering depression through interpersonal psychotherapy: Monitoring Form booklet. Graywind Publications Incorporated, USA.
- Weissman, M., 1995b. Mastering depression through interpersonal psychotherapy: Patient workbook. Oxford University Press, New York.
- Weissman, M., Markowitz, J. C., & Klerman, G. L., 2000. *Comprehensive Guide to Interpersonal Psychotherapy*. Basic Books, New York.
- Weissman, M., Markowitz, J. C., & Klerman, G. L., 2007. *Clinician’s Quick Guide to Interpersonal Psychotherapy*. Oxford University Press, New York.

Wright, F. Bewick, B.M., Barkham, M., House, A.O., Hill, A.J., 2009. Co-occurrence of self-reported disordered eating and self-harm in UK university students. *Br J Clin Psychol.* 48, 397-410. doi: 10.1348/014466509X410343.

Table 1. Demographic and clinical baseline data on the treatment and control groups (intention to treat)

Variable	IPC (n=20)*	IPT (n=20)*	χ^2 or <i>t</i> Value	<i>df</i>	<i>P</i> Value
Age, mean (SD) years	38.6 (12.6)	37.5 (13.0)	0.27	38	.84
Sex					
Female	13 (65%)	16 (80%)	0.29	1	.48
Male	7 (35%)	4 (20%)			
Marital status					
Married or cohabiting	15 (75%)	13 (65%)	0.48	1	.73
Single or divorced	5 (25%)	7 (35%)			
Educational level					
Low	1 (5%)	2 (10%)			
Intermediate	14 (70%)	12 (60%)	0.58	2	.79
High	5 (25%)	6 (30%)			
Job status					
Employed or studying	14 (70%)	11 (55%)	0.96	1	.51
On sickness benefit or unemployed	6 (30%)	9 (45%)			
Alcohol use (Audit)					
Lower risk (0-7)	17 (90%)	16 (89%)	0.00	1	1.00
Increasing or higher risk (8+)	2 (10%)	2 (11%)			
Depression					
Current	7 (37%)	10 (50%)	0.69	1	.52
Recurrent	12 (63%)	10 (50%)			
Antidepressant medication					
No medication	11 (55%)	6 (30%)	2.56	1	.20
Medication	9 (45%)	14 (70%)			
CORE-OM, mean (SD)	17.5 (4.1)	16.6 (5.5)	0.58	38	.57
Well-being scale	22.5 (5.8)	22.5 (7.2)	0.00	38	1.00
Symptoms scale	22.5 (5.6)	22.5 (7.6)	0.02	38	.99
Functioning scale	18.1 (5.7)	15.5 (5.1)	1.49	38	.15
Risk scale	3.2 (3.9)	3.3 (5.7)	0.05	38	.96
BDI, mean (SD)	22.5 (8.5)	21.8 (8.0)	0.26	36	.80

* Data are expressed as numbers and percentages

Note: IPC=interpersonal counselling, IPT=interpersonal psychotherapy, Audit=Alcohol Use Disorders Identification Test (scale range 0-40), CORE-OM=Clinical Outcomes in Routine Evaluation (scale range 0-40), BDI=Beck Depression Inventory (scale range: 0-63).

Table 2. Parameter estimates for the IPC and IPT groups

Groups	Parameter	CORE-OM	BDI
IPC	Baseline	17.515***	22.627***
	End	-8.231***	-13.172***
	6-MFU	-0.351	-0.778
	12-MFU	0.280	-1.026
IPT	Baseline	17.515***	22.593***
	End	-8.294***	-13.278***
	6-MFU	-0.327	-0.657
	12-MFU	0.262	1.056
Group differences	Baseline	-0.880	-0.785
	End	0.929	3.069
	6-MFU	-0.185	-1.090
	12-MFU	-1.130	-1.675

Note. *P <0.05. **P<0.01. ***P<0.001. The IPC and IPT parameter estimates at baseline are outset scores and the other IPC and IPT parameter estimates are changes with time. The group difference parameter estimates at baseline are differences in outset scores between the IPT and IPC groups, and the other group difference parameter estimates are group differences in changes. The p-values of the group differences are all greater than 0.1, IPC=interpersonal counselling, IPT=interpersonal psychotherapy, MFU=month of follow-up.

