Investigating the efficacy of a whole team, psychologically informed, acute mental health service approach

David Araci & Isabel Clarke

Published online: 08 Feb 2016.

Submit your article to this journal ⤤

View related articles ⤤

View Crossmark data ⤤

ORIGINAL ARTICLE

Investigating the efficacy of a whole team, psychologically informed, acute mental health service approach

David Araci[1] and Isabel Clarke[2]*

[1]Dorset Healthcare NHS Foundation Trust, St. Ann's Hospital, St. Ann's Hospital, Dorset Forensic Team, Poole, United Kingdom of Great Britain and Northern Ireland and [2]Southern Health NHS Foundation Trust, Southampton, United Kingdom of Great Britain and Northern Ireland

Abstract

Background: Service user demand and service changes, from hospital based, to community and hospital mix, within acute adult mental health services, focus the need for psychologically informed, holistic, approaches.
Aims: (1) Describe and report feasibility of a psychologically led Intensive Support Programme (ISP) to meet this need. (2) Present results of a pilot evaluation of this programme.
Method: ISP was implemented in four acute mental health services of the Southern Health NHS Trust, available to both inpatient and outpatient acute services. Evaluation of the service one month after data collection, illustrates operation and level of uptake across different professional roles. The programme was evaluated by assessing psychological distress (CORE-10) and confidence in self-management (Mental Health Confidence Scale) of participating service users before and after intervention.
Results: The service evaluation demonstrated extensive roll out of this programme across acute services of an extensive NHS Trust. Repeated measure *t*-tests demonstrated significant decrease in distress ($p < 0.0005$) and significant increase in confidence in self-management of mental health ($p < 0.0005$).
Conclusion: Evaluation shows that ISP can be delivered in routine care in an acute mental health service and results in improvement in self management skills and facilitation of recovery.

Introduction

The challenge of delivering psychological approaches within acute care

The need to implement recovery based, holistic and psychologically informed care approaches in the pressured and risk adverse environment of the acute mental health service has been extensively noted (e.g. Mind, 2011; Schizophrenia Commission, 2012). This has been tackled in a variety of ways.

- Increasing the availability of psychological and social therapies to patients on the wards using psychological models such as Solution Focused Therapy and Narrative approaches to inform interactions between nursing staff and patients (British Psychological Society, 2012, Good practice example, p. 32; Bowles et al., 2001; Duncan et al., 2005; Mason et al., 1994; Vatne & Hoem, 2008; Whitall & Allie, 2011).

- Group work to provide focus and occupation, and disseminating psychological and other and therapeutic approaches. Marion Janner's Star Wards initiative has been influential in increasing activity (Bright, 2006) and availability of talking therapies (Bright, 2009) on wards.

A number of evaluations of inpatient psychological groups have recently been published: (e.g. Heriot-Maitland et al., 2014; Jacobsen et al., 2011; Radcliffe et al., 2010). While these initiatives are very valuable in themselves, they remain additions to the work of the ward, and do not claim to be integrated within the central focus of care.

In response to the need to embed the psychological initiative in the work of the whole Acute Team, inpatient and community, the psychologically informed environment (PIE) approach was followed (Johnson & Haigh, 2011; Maguire, 2012; Maguire et al., 2012; Maguire & Willoughby, in press). Application in inpatient services has been limited so far. Newman-Taylor & Sambrook (2012), using CBT formulation with staff for promoting culture change in an inpatient psychiatric rehabilitation setting, found that the formulation increased staff understanding of the behaviour, followed by decreased incidents of challenging behaviour and staff burnout.

A PIE programme addressing the issues cited above was developed and piloted in one area of the Southern Health Trust (Durrant et al., 2007). Service users were engaged with the

*Requests for reprints should be addressed to Isabel Clarke, Grove House, Adult Mental Health Division, Southampton, SO14 3TJ, England (e-mail: isabel.clarke@southernhealth.nhs.uk).

Correspondence: David Araci, Dorset Healthcare NHS Foundation Trust, St. Ann's Hospital, St. Ann's Hospital, Dorset Forensic Team, Poole BH13 7LN, United Kingdom of Great Britain and Northern Ireland. E-mail: david.araci@nhs.net

programme through an individual, emotion focused formulation. This conceptualises mental health problems as means of coping with overwhelming affect/unmanageable experiences in ways that work well in the short term but prove dysfunctional in the long term (Clarke, 1999, 2009, in press). Designed to fulfil Recovery goals (Shepherd et al., 2012), Intensive Support Programme (ISP) utilized third wave approaches such as Dialectical Behaviour Therapy (DBT; Linehan, 1993) that make skills identification and training central to a therapeutic process. Involving the wider staff group in skills teaching devolves therapy delivery and impacts the whole culture.

Evaluation of the initial pilot PIE programme indicated that, following the intervention, service users felt more able to cope with their mental health difficulties, had a greater sense of control and were more confident in managing their emotions.

The current ISP project seeks to apply the same principles to the care of individuals entering the four NHS acute mental health services, inpatient and community based, across a Trust, covering urban as well as rural environments. This paper reports work in progress on the feasibility of this broader application and the results of assessment of service users' well-being and confidence in managing their problems following the intervention, and explores the feasibility of collecting such data in routine care. Qualitative evaluation of the service user experience of ISP and effect on staff, using service user interviewers, is being conducted and will be reported separately.

Methods

Intervention

The ISP intervention for users of acute mental health services, referred by the acute team or identified by their key worker, either in the inpatient unit or under the Hospital at Home (H@H) consisted of an emotion focused formulation and groups or individual skills work, (see Clarke, 1999, 2009, in press for more detail). Service users under H@H initially completed the formulation either as an inpatient, prior to community discharge, or if referred directly from the H@H team were invited to meet with a Clinical Psychologist at the nearest acute hospital. After which, H@H referrals were then able to attend the inpatient groups. The formulation is delivered by a Clinical Psychologist, or other member of the acute team, trained and supervised in the model. Formulation identifies areas to be addressed often by therapeutic groups. The core programme of groups comprised: DBT based Emotional Coping Skills, Mindfulness, Psychotic Symptom Management, Stress and Anxiety Management and Compassionate Friend (to introduce a compassionate mind approach – Gilbert, 2005) adapted to fit with the DBT based model (manuals available from Clarke, 2013). Group facilitation skills were disseminated from the therapy team to the wider staff using a competency development model, thus enabling ongoing skills coaching.

Study participants and setting

Participants in the study were drawn from service users referred to ISP who had been admitted into hospital acute

wards or referred to the acute community service (H@H) with distressing mental health presentations between October 2012 and May 2014 across the Trust. Inclusion criteria consisted of an ISP referral and having completed both pre and post evaluative measures.

Mental Health Confidence Scale (MHCS)

The MHCS measures self-efficacy in relation to one's mental health. The MHCS is a self-report measure composed of 16 items that measures confidence across three sub-scales: optimism, coping, and advocacy. The scale has high construct validity and low error variance (Carpinello et al., 2000) and has been shown to display good internal consistency (Castelein et al., 2008) making it a reliable measure. The current study showed good reliability at both time points (preMHCS $\alpha = 0.94$, postMHCS $\alpha = 0.95$).

Clinical Outcomes in Routine Evaluation (CORE)

The Clinical Outcomes in Routine Evaluation-outcome measure (CORE-OM; Barkham et al., 2001; Evans et al., 2000) is a 34-item measure of psychological distress. In order to minimise the load on the service user a 10 item version of this questionnaire, the CORE-10 (Connell & Barkham, 2007), is utilised within the service and for the current study. The CORE-10 uses a cut-off of 11 to indicate whether a person falls into a clinical population. It is comprised of four sub-scales measuring well-being, symptoms, functioning and risk. Statements refer to one's psychological distress. The current study showed good reliability at both time points (preCORE10 $\alpha = 0.93$, postCORE10 $\alpha = 0.93$).

Procedure

The current study falls under the remit of service evaluation, and as such did not require NRES approval. The study was declared to the Trust's research and development department who approved the procedure. Clinical outcome measures were collected upon initial ISP referral, prior to any ISP sessions, and again after ISP discharge allowing for pre and post treatment comparison.

Statistical analysis

Data analysis was carried out utilising SPSS (version 19, Armonk, NY). All pre and post outcome measures were analysed for normal distribution in order to conduct parametric testing. Kurtosis and skew were analysed and each scale was confined between -3.29 and 3.29, suggesting normal distribution (Field, 2009). Repeated measures t-tests were conducted to examine differences in pre and post measures of each scale; MHCS ($N = 131$), CORE-10 ($N = 120$).

Feasibility: embedding the ISP programme in the service

An evaluation of ISP clinical activities taking place within a specific time period is included to demonstrate the feasibility of embedding of the ISP programme across participating acute mental health care teams and extent of adoption by staff. Recent inpatient psychological group initiatives

(e.g. Heriot-Maitland et al., 2014; Jacobsen et al., 2011; Radcliffe et al., 2010), while valuable remain un-integrated with the central focus of care on the wards.

Results

The sample consisted of 46 male participants and 85 female participants with a mean age of 38.15 ($SD = 12.01$). As ISP is applicable across diagnoses, diagnosis was not part of the eligibility criteria; however clustering information is recorded on the existing electronic data system (RiO), inclusive of ethnicity information and is presented herein. Of the current sample, 94 participants had recorded data; ethnicity demonstrated backgrounds of one Asian British, one black British, 84 white British, one mixed race white and black Caribbean, four white other background, and three unstated; clustering information demonstrated the sample as consisting of 35 non-psychotic (mild/moderate/severe), 31 non-psychotic (very severe and complex), 20 psychosis, and eight organic (cognitive impairment).

Service user assessment

MHCS

There were 131 complete comparable pre and post measures of the MHCS. Table 1 presents the descriptive statistics for the overall sample and the sub-samples in each participating team. Overall, the mean score increased from 45.93 to 57.34. Based on Cohen's (1988) suggestions, the effect size was large ($d = 0.69$, 95% CI [0.43, 0.93]). A repeated measure t-test showed that the difference between pre and post MHCS scores was significant. This demonstrated that participants scored significantly higher on the MHCS after ISP treatment; participants reported higher confidence in their mental health after taking part in the ISP.

CORE-10

There were 120 complete comparable pre and post measures of the CORE-10. Table 2 demonstrates the descriptive statistics for the overall sample and the sub-samples in each participating team. Overall, the mean score decreased from 24.57 to 19.13. The effect size was large ($d = 0.61$, 95% CI [−0.87, −0.35]). A repeated measure t-test showed that the difference between pre and post CORE-10 scores was significant. This demonstrated that participants scored significantly lower on the CORE-10 after ISP treatment; participants reported less distressing symptoms after taking part in the ISP.

Feasibility of embedding ISP

Initial training was an important element in embedding the approach across the services. Over 200 staff, across professions, including management, received introductory training to ISP. RiO demonstrated a total of 340 ISP referrals across areas since programme implementation. This is an underestimation of referrals due to incomplete data capture and as areas were recording with in-house databases before being trained in using RiO to record ISP data.

Table 3 details ISP clinical activities conducted over a two week period, between 2nd June 2014 and 15th June 2014; ISP

Table 1. Descriptive statistics for MHCS pre and post treatment.

Group	N	MHCS pre		MHCS post		T	d
		M	SD	M	SD		
Overall	131	45.93	16.77	57.34	16.56	−9.71**	0.69
North	10	47.40	17.85	57.80	9.08	−2.02	0.73
East	96	46.36	17.67	57.86	17.39	−8.64**	0.65
South	13	44.69	9.95	53.46	12.28	−2.49*	0.78
West	12	42.58	15.59	57.50	19.39	−3.14*	0.85

$**p < 0.005$, $*p < 0.05$.

Table 2. Descriptive statistics for CORE 10 pre and post treatment.

Group	N	CORE 10 pre		CORE 10 post		T	d
		M	SD	M	SD		
Overall	120	24.57	8.85	19.13	8.90	6.6**	0.61
North	11	24.09	8.12	18.18	4.81	2.74*	0.89
East	84	24.54	9.08	19.30	9.50	5.37**	0.56
South	12	24.08	8.96	21.42	8.32	0.76	0.31
West	13	25.69	8.70	16.75	8.14	4.16**	1.07

$**p < 0.005$, $*p < 0.05$.

referrals (25 – incomplete data), emotion focused formulations (EFF; 36 – incomplete data), skills groups running at the time (10), total attendees to groups (52), staff conducting clinical work (21) and job roles of these staff; clinical psychologists, assistant psychologist, nurses, occupational therapists The data demonstrates that all areas had referrals, but not all recorded their numbers, and most were conducting emotion focused formulations. Note that Table 3 primarily includes group work and not the entirety of one to one work often conducted on the ward as teaching staff to record this is an ongoing process. In Table 3, the column ''attendees'' provides data indicating the total attendance for all sessions of the group.

Discussion

This paper reported on the implementation of the ISP approach, delivered in different acute mental health services in Southern Health NHS Foundation Trust. The evaluation of ISP clinical activities showed that in most participating teams emotion based formulations were utilised and a variety of groups were running, facilitated by a range of staff, demonstrating the feasibility of the approach in routine practice.

Results of the assessment of psychological distress (CORE 10) and mental health confidence (MHCS) of service users who participated in this intervention are presented, indicating significant decrease in the levels of psychological distress and significantly improved confidence in self-management of mental health issues, replicating the results of the pilot study by Durrant et al. (2007). Increase in MHCS scores suggest, within the limitations of the study outlined below, that the aim of the therapeutic interventions, to give people skills and confidence to manage their own mental health problems, are being realised, and that the approach represents a promising avenue for acute mental health service development and further research.

Table 3. Demonstrates a two week time point (2/06/2014–15/06/2014) across areas.

	Referrals	EFF	Groups (sessions per group)	Attendees	Staff involved
North	12	11	ECS (eight sessions)	20	2 × Clinical psychologist
			Mindfulness (daily single session)	8	1 × Mental health practitioner
			Compassionate friend (two sessions)	8	4 × Nurse
			Psychotic symptom management (two sessions)	5	
East	7	8	ECS (eight sessions)	5	1 × Clinical psychologist
			Mindfulness (daily single session)	1	1 × Nurse specialist practitioner
					2 × Nurse
South	Data not available	Data not available	ECS (12 sessions)	20	1 × Clinical psychologist
					1 × OT
					1 × Assistant psychologist
					1 × Nurse
West	6	17	ECS (eight sessions)	7	4 × Clinical psychologist
			SAM (two sessions)	16	2 × Nurse
			Compassionate friend (two sessions)	9	
Total	25	36	10	52	21

Implementation and feasibility

The two-week clinical activity snapshot illustrates ongoing development of the service. Extent of involvement of the wider staff group in the delivery of ISP is an important indicator of the success of the innovative element of this programme. Most services have good group programmes, and access to psychological formulation. Involvement of nursing staff in programme delivery is evidenced, but patchy. More staff members are informed about the principles having received awareness training. Staff presence at formulation is encouraged (where resources allow). A parallel qualitative study (Araci et al., 2015) exploring impact of the programme on staff shows staff appreciation of understanding and involvement with the psychological approach, and resulting positive impact on the one to one care that service users have received. Staff reported being better able to support service users in distress and becoming more psychologically minded in their approach to patient care.

The study illustrates the transmit-ability of an innovative approach from the context in which it was developed under the direct leadership of the innovator (as recorded in Durrant et al., 2007) to four services, under the leadership of different clinical psychologists. The innovator's (second author) role was mainly concerned with initial training, and ensuring data collection and evaluation.

Strengths and limitations

This study represents the first attempt to describe and evaluate the implementation of a PIE in an acute setting. It is ambitious in its scope, extending across the four acute services of an entire Trust and aiming at uniformity of model and mode of delivery in different settings. Training in the model was provided to over 200 staff members across professions. Within the constraints listed below, it was possible to collect a considerable sample. The principal objectives of the programme of providing service users with a psychological understanding of their problems and giving a recovery message from the outset, has potential for wide application, given both the need and the desirability of handing over more responsibility to the service user in the current climate.

However, the scale and scope of the intervention impacted the scope and rigour of data collection. The majority of the data comes from the area that adopted the approach first, and so had had more time to embed its systems, but was less culturally diverse than other areas, which is reflected in the demography. Lack of a control group inevitably limits the confidence that can be placed in the evaluation results presented here. There were major problems in translating the new system onto the existing electronic data system (RiO) which held back the project. Open RiO which allows clinicians to request additional functionality that can be added by a Trust's system support team, thus allowing for central database recording, was not introduced until the end of the data collection period. As noted, although there were more than 300 ISP referrals at the time of the current study, full pre- and post outcome measures were not available due to factors such as deficiencies in recording, and lack of a central database. Time two data was lost through unanticipated discharge and discharge to other areas, leading to the discrepancy between referrals into ISP and complete data sets collected.

Evaluation of a psychological programme in an acute setting poses problems. Completion of extensive questionnaires is not practical at this stage, and symptom measurement will reflect the input of the full service and not the psychological element alone (Durrant & Tolland, 2008). For these reasons and because of the limitations of the electronic data system, only two, simple tools, the MHCS and the CORE-10 were employed.

While improvement in CORE-10 scores is to be expected, improvement in MHCS scores are suggestive of effect additional to the impact of removal from the usual environment and medication change, both of which might decrease rather than increase self efficacy and self management skills.

Future directions

This study demonstrates the feasibility of conducting a multi centre version of the Durrant et al. (2007) pilot with additional staff involvement. It explores both the potential and problems of collecting outcome measures in routine acute care. Hopefully this learning can inform the design of more rigorous, controlled and properly funded studies to test both

the efficacy of the core intervention and the wider, PIE, effect of delivering the intervention in this way. The model is being implemented in a number of other areas in the UK providing hope for such development.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

References

Araci D, Clarke I, Pearce K, et al. (2015). The implementation of a psychologically informed environment in an acute services: Staff perspectives. Manuscript under preparation.

Barkham M, Margison F, Leach C, et al. (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, 184–96.

Bowles N, Mackintosh C, Tom A. (2001). Nurses' communication skills: An evaluation of the impact of solution focused communication training. J Adv Nurs, 36, 347–54.

Bright. (2006). Star wards: Practical ideas for improving the daily experiences and treatment outcomes of acute mental health in-patients. London: Bright.

Bright. (2009). Talk well: Encouraging the art of conversation on mental health wards. London: Bright.

British Psychological Society. (2012). Commissioning and delivering clinical psychology in acute adult mental health care guidance for commissioners, service managers, psychology managers & practitioners. Leicester: BPS.

Carpinello SE, Knight EL, Markowitz FE, Pease EL. (2000). The development of the mental health confidence scale: A measure of self-efficacy in individuals diagnosed with mental disorders. Psychiatr Rehabil J, 23, 236–43.

Castelein S, van der Gaag M, Bruggeman R, et al. (2008). Measuring empowerment among people with psychotic disorders: A comparison of three instruments. Psychiatr Serv, 59, 1338–42.

Clarke I. (1999). Cognitive therapy and serious mental illness. An interacting cognitive subsystems approach. Clin Psychol Psychother, 6, 375–83.

Clarke I. (2009). Coping with crisis and overwhelming affect: Employing coping mechanisms in the acute inpatient context. In: Columbus AM, ed. Coping mechanisms: Strategies and outcomes. Advances in psychology research, vol. 63. Huntington NY State: Nova Science Publishers Inc.

Clarke I. (2013). Groups and manuals. Isabelclarke.org. Available from: http://www.isabelclarke.org [last accessed 8 Jan 2014].

Clarke I. (2015). The emotion focused formulation approach: Bridging individual and team formulation. Clin Psychol Forum, 275, 28–33.

Cohen J. (1988). Statistical power analysis for the behavioral sciences, 2nd ed. Hillsdale: Lawrence Erlbaum.

Connell J, Barkham M. (2007). CORE-10 user manual, version 1.1. Rugby, UK: CORE System Trust &CORE Information Management Systems Ltd.

Duncan A, Fialko L, Rowe A, et al. (2005). Helping patients to write their own account of their admission to hospital: How do they respond and can nursing staff help? Proc Br Psychol Soc, 13, 170.

Durrant C, Clarke I, Tolland A, Wilson H. (2007). Designing a CBT service for an acute in-patient setting: A pilot evaluation study. Clin Psychol Psychother, 14, 117–25.

Durrant C, Tolland A. (2008). Evaluating short-term CBT in an acute adult in-patient unit. In: Clarke I, Wilson H, eds. Cognitive behavior therapy for acute inpatient mental health units; working with clients, staff and the milieu. Hove UK: Routledge, 185–97.

Evans C, Mellor-Clark J, Margison F, et al. (2000). CORE: Clinical outcomes in routine evaluation. J Ment Health, 9, 247–55.

Field A. (2009). Discovering statistics using SPSS, 3rd ed. London: Sage.

Gilbert P. (2005). Compassion: Conceptualisations, research and use in psychotherapy. Hove, UK: Routledge.

Heriot-Maitland C, Vidal JB, Ball S, Irons C. (2014). A compassionate-focused therapy group approach for acute inpatients: Feasibility, initial pilot outcome data, and recommendations. Br J Clin Psychol, 53, 78–94.

Jacobsen P, Morris E, Johns L, Hodkinson K. (2011). Mindfulness groups for psychosis: Key issues for implementation on an inpatient unit. Behav Cogn Psychother, 39, 349–53.

Johnson R, Haigh R. (2011). Social psychiatry and social policy for the 21st century: New concepts for new needs – the 'Enabling Environments' initiative. Ment Health Soc Inclusion, 15, 17–23.

Linehan M. (1993). Cognitive behavioral treatment of borderline personality disorder. New York: The Guildford Press.

Maguire N. (2012). Training for front-line homeless workers: Practicalities and ethics of teaching cognitive behavioural and dialectical behavioural psychological therapeutic techniques. Housing Care Supp, 15, 177–85.

Maguire N, Grellier B, Clayton K. (2012). The impact of CBT training and supervision on burnout, confidence and negative beliefs in a staff group working with homeless people. Housing Care Supp, 15, 177–85.

Maguire N, Willoughby K. (in press). Cognitive behaviour therapy and homelessness: Treatment and service issues. Int J Behav Consult Ther.

Mason WH, Breen RY, Whipple WR. (1994). Solution-focused therapy and inpatient psychiatric nursing. J Psychosoc Nurs Ment Health Serv, 32, 46–9.

Mind. (2011). Listening to experience: An independent inquiry into acute and crisis mental health care. London: Mind.

Newman-Taylor K, Sambrook S. (2012). CBT for culture change: Formulating teams to improve patient care. Behav Cogn Psychother, 40, 496–503.

Radcliffe J, Hajek K, Carson J, Manor O, eds. (2010). Psychological groupwork with acute psychiatric inpatients. London: Whiting & Birch Ltd.

Schizophrenia Commission. (2012). The abandoned illness: A report by the Schizophrenia Commission. Rethink Mental Illness.

Shepherd G, Boardman J, Slade M. (2012). Making recovery a reality. London: Sainsbury Centre.

Vatne S, Hoem E. (2008). Acknowledging communication: A milieu-therapeutic approach. J Adv Nurs, 61, 690–8.

Whitall S, Allie, S. (2011). Using narratives on an acute psychiatric ward. Counsel Psychol Rev, 26, 34–44.