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Simulation-based training for front-of-house staff in psychosis services

David Baumeister^a, , Elaine Gill^b, Bernadette O'Neill^b, Rachel Perera^c and Suzanne Jolley^a

^aDepartment of Psychology, King's College London, Institute of Psychiatry, London, UK;

^bSchool of Medicine, King's College London, London, UK;

^cTraining and Education, South London & Maudsley NHS Foundation Trust and King's Health Partners, UK

Abstract

Staff communication skills are key to improving patients' experience of healthcare, from the point of first contact with services to treatment end. To date, training initiatives to improve communication have prioritised the clinical workforce, rather than allied and support staff. In this study we evaluated the impact of simulation-based communication training for "front-of-house" staff (receptionists and administrators) working in specialist psychosis services. Forty-three staff completed the two-day training. Before and after training, staff rated the importance of communication skills in their role (Attitude), their understanding of psychosis (Knowledge), and their workplace satisfaction (Satisfaction). Attendees repeated the measures at follow-up (6–12 months post-training; $n = 11$), alongside a behavioural communication skills task, and were compared to a group of non-attenders ($n = 12$). Pre–post improvements were evident on all measures, reaching significance for Knowledge (medium effect). Improvements were mostly maintained in the 26% of attendees completing follow-up assessments. At follow-up, attendees scored significantly higher than non-attenders on Attitude and Knowledge (large effects), marginally higher on skills, but lower on Satisfaction. The workshops improved staff understanding of psychosis and the importance of communication in their roles. The impact of the training on service users' satisfaction with services should now be evaluated in a controlled trial.

Keywords

- education,
- communication training,
- simulation,
- schizophrenia,
- psychosis

Introduction

Effective communication is increasingly recognised as an important component of good clinical practice and high-quality healthcare, with a positive impact across a range of health outcomes, professional satisfaction, and service users' experience of the quality of care received (Michie, Miles, & Weinman, 2003; Silverman, 2009). Training in clinical communication has benefited from the introduction of simulation, employing actors and patient educators, to allow students in the healthcare professions to safely develop their skills (Gill, 2007). In mental health care, good communication is particularly crucial, as signs and symptoms are usually self-reported, rather than objectively measured. A growing evidence base attests to the adverse impact of poor communication on service user experience and functioning, and on the well-being of both service users and staff (Berry, Barrowclough, & Haddock, 2010; Chase, Zinken, Costall, Watts, & Priebe, 2010; Pitarka-Carcani, Szmukler, & Henderson, 2000; Priebe, Watts, Chase, & Matanov, 2005). Good communication, conversely, builds positive therapeutic relationships, is highly valued by service users, and is associated with superior clinical outcomes (Andreasson & Skärsäter, 2012; Gould, 2013; McGuire-Snieckus, McCabe, Catty, Hansson, & Priebe, 2007; Mercer & Reynolds, 2002).

The clear, informative, empathic and helpful interactions characterising good clinical communication may be particularly difficult to establish in the context of psychosis.

Difficulties with social and interpersonal perception, problems with attention and memory, different views of the nature and cause of presenting difficulties, thought disorder, paranoia, anomalous experiences, over-arousal, substance misuse, negative symptoms and mood may all impact adversely on interactions with others, and consequently on the experience of care (Bertrand, Sutton, Achim, Malla, & Lepage, 2007; Evensen et al., 2012; Garety, Bebbington, Fowler, Freeman, & Kuipers, 2007; Ghane, Kolk, & Emmelkamp, 2010; Piskulic & Addington, 2011; Schuckit, 2006; van Os & Kapur, 2009). The heterogeneity of presentation, both within

the range of psychotic disorders, and within an individual in the context of relapse and recovery, requires exceptional flexibility and sensitivity in communication style. Moreover, care is delivered in a social context: familial and other informal caregivers of people experiencing psychosis often contact services in a state of crisis or upset, and may also be experienced as difficult to communicate with by staff (Kuipers, Onwumere, & Bebbington, 2010). The United Kingdom (UK) National Institute for Health and Care Excellence schizophrenia guideline (NICE, 2009; updated 2014) states that “good communication between healthcare professionals and service users is essential” and recommends that services adopt a person-centred approach, taking “into account service users’ needs and preferences” (p. 5). However, despite acknowledgement that the service user experience begins with the first contact with the service, and that quality improvement initiatives should therefore be organisation-wide, problem-specific communication skills training rarely forms part of induction or professional development for “front-of-house” staff, such as receptionists or administrators. Furthermore, initial interactions set the scene for, and can have a significant bearing upon, subsequent communicative behaviour. Front-of-house staff are therefore particularly well-placed to contribute positively to the service user experience by communicating effectively (Darzi, 2008).

In this study, we built on the growing evidence base that communication skills to promote better-quality interactions in healthcare provision can be taught in a brief format (Carvalho et al., 2010; Jenkins et al., 2010; McLeod, Deane, & Hogbin, 2002; Othieno et al., 2013; Sargeant, MacLeod, & Murray, 2011), to design a simulation-based training specifically for front-of-house mental health staff working with people experiencing psychosis. The training drew on our expertise in clinical communication, workforce development and psychosis. We report here on a pilot evaluation of the feasibility of the training and impact on staff, designed to inform a future randomised controlled evaluation of the impact of training on

both staff communication and service user satisfaction. We hypothesised that following training, staff would show an increase in their:

1. perception of the importance of communication skills in their role,
2. knowledge about psychosis and
3. sense of workplace satisfaction.

We also hypothesised that these improvements would be maintained at follow-up, and that training attenders would show superior attitudes, knowledge, satisfaction and skills compared to a control group of non-attenders working in a similar setting.

Method

Attendees

Staff were recruited and trained in cohorts of 6–12 individuals over 12 months. All participants were employees of a large NHS mental health Trust, employed at UK Agenda for Change bandings 1–4 (administrative and support roles) and had contact with service users experiencing psychosis. Attendees were selected through liaison with the service Education and Training lead (RP), who approached senior business managers and asked them to nominate staff who they thought would benefit from the training. All attendees were working-age adults aged 18–65, and all completed the pre–post evaluation. No information was gathered on potential attendees who declined training.

For the follow-up evaluation, 6–12 months after the end of training, the same group of attendees was re-contacted by email, with telephone and face-to-face follow-up, and 11/43 participated. A control group of 12 staff who had not completed the training was identified at follow-up by senior business managers and through workplace contacts. Follow-up attendees and controls were also invited to participate in a behavioural observation of skills within the workplace; seven attendees and seven controls agreed.

Training

Workshops were delivered by a clinical psychologist (SJ), with experience in teaching frontline staff skills in cognitive behavioural therapy and family interventions for people with psychosis, and the service Education and Training Lead (RP), who had a background in nursing and management, many years' experience in training healthcare staff at a range of levels of expertise, and a specialist interest in recovery training. Workshops were designed to be accessible, non-threatening, interactive and experiential. Throughout the training, particular care was taken to facilitate and to validate contributions from all attendees, and to communicate the importance of their roles for the service. Training was delivered over two full days, with an interval of 2–4 weeks between workshops, to allow reflection and workplace observation.

Psychoeducation about psychosis and caregiving (0.5 days, Day 1 morning)

This included teaching about the complex aetiology, experience, treatment and outcome of psychosis in biopsychosocial terms, illustrated with a selection of personal accounts of individuals with psychotic experiences. Experiential exercises were designed to raise awareness of the effect of invalidating communication styles, the impact of voices on communication, and the emotional and social impact of psychosis on caregivers. The content was designed with input and oversight from a service user consultant.

Education on communication methods (0.5 days, Day 1 afternoon)

Training was adapted from that used for multidisciplinary health professionals in the Chantler Clinical Skills Centre of King's College, London (KCL CCSC; 4, 5), a Clinical Simulation and Interactive Learning (SaIL) Centre, in collaboration with senior staff from the unit (EG, BO'N). The session included teaching on core concepts of communication contextualised in a clinical setting (e.g. building rapport, listening skills, showing empathy and the impact of different questioning styles); reflections on key characteristics of successful and unsuccessful clinical interactions; how the difficulties faced by people experiencing psychosis may impact on interactions; and the adaptations required to overcome the specific difficulties. At the

end of Day 1, attendees were asked to observe communications and interactions within their own workplace, with staff, service users and caregivers, and to think about the factors in their own work environments that facilitated good communication, and those that posed a barrier to it.

Implementation in the workplace (0.25 days, Day 2 morning)

The second day of training began with a summary of Day 1, and feedback on the workplace observation task. A reflective discussion of how these difficulties might be addressed led into individually tailored, facilitated role plays in small groups designed to address the issues raised. For example, for one reception setting, staff were required to answer the telephone and the intercom for the front door as well as greet service users: the role play centred around managing these tasks simultaneously. In one ward setting, administrators reported a lack of clarity over the boundaries of their interactions with service users: the role play scenario focused on assertive communication with clinical staff to clarify the accepted boundaries; then sensitively implementing these with service users.

Simulations (0.5 days, Day 2 afternoon)

Three scenarios were designed based on feedback from the service manager for front-of-house staff, with the support of the KCL clinical communication faculty and patient educators working with the centre. The first scenario required staff to show sensitive engagement and empathy to a service user who had attended the team base or ward feeling very paranoid, with a strongly held delusion about being followed and attacked, feeling distrustful of staff, and taking measures to preserve their sense of safety (e.g. sit out of sight, hide under a desk, stay away from the door). The second required staff to establish boundaries with a service user experiencing hypomania, who was slightly irritable, asking personal questions and making behavioural demands, approaching other service users inappropriately, and attempting to look at confidential material in the reception area. The final scenario involved communicating urgent clinical information assertively to a busy and

dismissive senior clinician, requiring skills in signalling the importance of the communication, and ensuring that this was both stated and heard accurately. Trained actors with experience in playing mental health scenarios for postgraduate medical examinations were employed to play each part, and were briefed by KCL clinical communication staff as well as the trainers. Each training attendee took a turn to play at least one scenario (and usually all three), with feedback on their performance, and the opportunity to retry until they were happy with their performance. Simulations were carefully set up in accordance with KCL clinical communication guidelines as safe learning environments, with guidance on how feedback should be given and received. As this group of staff often had little experience of formal professional education, extra emphasis was placed on normalising anxiety and its impact on performance, and validating all efforts as useful learning. The simulation sessions finished with an overall reflection, feedback and “what to take forward” session, which closed the workshop and completed the training.

Measures

Questionnaire assessments

Attendees completed a questionnaire designed specifically for the workshop, including 11 items rating the importance of communication skills in their role (Attitude), 15 rating knowledge about psychosis (Knowledge), 6 rating workplace satisfaction (Satisfaction) and a section for qualitative comments. Attendees also rated how helpful they expected the workshops to be, and, at the end, how helpful they had been (Expectations). Attitude was rated by asking how important staff felt the following were for their work: (i) understanding psychosis and the service context; and (ii) being welcoming and engaging, setting boundaries and passing on important information to staff, service users and carers. Knowledge items are shown in Table 2 of the Supplemental File. The Satisfaction score comprised ratings of how satisfied staff felt with (i) their interactions with service users, carers and other staff; (ii) their role in their team; (iii) their role in the service; and (iv) an “overall” rating. Expectations

were rated using the same items as for attitudes. Scoring for Knowledge items consisted of a five-point Likert scale rated from 5 (agree very much) through “agree moderately”, “neither agree nor disagree”, and “disagree moderately” to 1 (disagree very much). Scoring for all other items was rated on a similar scale from 5 (very important) through “quite important”, “neither important nor unimportant”, and “quite unimportant” to 1 (totally unimportant). The questionnaire showed excellent internal reliability (Cronbach’s $\alpha = 0.9$ for Attitude, Satisfaction and Expectations, and 0.8 for Knowledge).

Behavioural observation

The translation of skills into the workplace was assessed at follow-up only by simulating a difficult interaction with a stranger and taking observational ratings of staff reactions. Staff consented to complete the task at some point “over the next few days”. They were approached within the hour by a research assistant (DB) who followed a pre-scripted interaction, involving being upset and frustrated at being late to see his supervisor who was a member of staff known to the service, but for whom they did not have contact details (RP or SJ, depending on the setting). The research assistant was brusque and offhand in manner, disrespecting confidentiality by trying to look through the sign-in book or at the computer screen. After three to four minutes participants were debriefed. Perhaps reflecting the busy nature of their roles, no staff member reported on questioning that they were aware of the purpose of the interaction while it was taking place. Competencies were assessed on a 15-item scale, including smiling and greeting appropriately; active listening; empathic responses to distress and unusual behaviour; communicating as appropriate with their team; and setting boundaries (ending exchanges, asking for changes to behaviour, refusing requests, explaining that they are not able to engage) effectively but calmly and pleasantly. Each item was rated on the same five-point Likert scale as the training evaluation questionnaire, with the additional option of “Not applicable” if the opportunity to display a particular competency did not present during the interaction. Skills were rated by the research

assistant and a second observer in order to assess inter-rater reliability, which was good, as was internal reliability (intraclass correlation coefficient = 0.9; Cronbach's α = 0.9).

Procedure

All attendees gave their consent for the evaluation. Approval for the study was granted by the Audit and Service Evaluation Committee of the host NHS Trust, as a staff training audit (Ref. PSYCHLO 13–34). The questionnaire measures were approved as part of a training evaluation the by King's College, London Psychiatry, Nursing and Midwifery Research Ethics Committee (Ref. PNM 111228). Attendees completed questionnaires at the start of Day 1 and the end of Day 2, and at follow-up. Follow-up data were collected 6–12 months after the workshops, at which point a group of non-attenders was also recruited as a comparison control group.

Analysis

Statistical analysis was performed using SPSS (IBM Corp., 2011). Paired sample *t*-tests were performed for each of the three total scores on the pre–post workshop measures (Attitude, Knowledge, Satisfaction). Within-subject effect sizes (ES) were calculated for significant results ($d = [\text{post mean} - \text{pre mean}] / \text{pooled standard deviation}$), as defined by Cohen (Cohen, 1988, 1992). Independent sample *t*-tests were employed for the follow-up comparison of workshop attenders to non-attenders. Inter-rater reliability for the behavioural task was calculated using intraclass correlations. Missing data were prorated, unless the number of missing items exceeded 20% of the total items of a subscale, in which case attendees were excluded from the analysis. With alpha set at 0.05, the overall pre–post analysis ($n = 43$) had 80% power to detect small effects ($d = 0.2$, Cohen, 1988, 1992), while the follow-up ($n = 23$) and between-group skills assessment ($n = 14$) were powered, with the same parameters, to detect large effects ($d = 1.23$, and $d = 1.63$, respectively).

Results

Staff welcomed the training, and expected it to be very helpful. Ratings of expected usefulness totalled 48.8 (SD 8.4) of a possible 55. Post-workshop ratings of achieved helpfulness did not differ significantly from pre ratings ($t(41) = 1.1, p = .26, n = 42$), but totalled 50.6 (SD 6.9). Staff reported valuing the simulations and the voices exercise, and identified additional scenarios, more detail on communication training, and the use of video feedback as areas to consider in future training.

Many attendees stated that they wished they had received the training when starting in their posts, as part of a mandatory induction. Feedback is summarised in Table 1 of the Supplemental File.

Hypothesis 1: Following training, staff will show an increase in (a) the perceived importance of communication skills (Attitude), (b) knowledge about psychosis (Knowledge) and (c) workplace satisfaction (Satisfaction).

Staff rated moderately highly on all three scales prior to training. Total scores increased on every scale following training, and reached significance for Knowledge ($t(42) = 5.0, p < 0.001, ES = 0.6$), but not Attitude ($t(42) = 1.4, p = .26$) or Satisfaction ($t(38) = 1.9, p = .06$). Mean scores for all measures at each timepoint are shown in Table 1.

Table 1 here

Pre–post differences in individual item scores for knowledge are shown in Table 2 of the Supplemental File; inspection of means suggests change was in knowledge of the multifactorial aetiologies of psychosis, occurrence of psychotic symptoms within the general population and potential unpleasant side-effects/lack of efficacy of antipsychotic medication.

Hypothesis 2: At follow-up, improvements will be maintained and training attenders will show superior knowledge, attitudes, satisfaction and skills compared to a control group of non-attenders working in a similar setting.

Improvements in Attitude and Knowledge were maintained and built upon at follow-up, and attenders differed significantly from non-attenders, with large effects (Attitude ($t(21) = 2.4$, $p = 0.02$, $ES = 1.0$; Knowledge ($t(21) = 2.9$, $p = 0.008$, $ES = 1.2$, Table 1). No significant differences were found for work satisfaction ($t(21) = 1.5$, $p = .14$) and communication competences ($t(12) = 0.2$, $p = .84$).

Discussion

We evaluated an innovative, simulation-based training for front-of-house staff in psychosis services. The aim of the training was to increase awareness of the importance of communication and communication skills in their role, knowledge about psychosis, and workplace satisfaction. The study was a pilot to inform a future randomised controlled evaluation of the impact of training on both staff communication and service user satisfaction. Training was feasible to deliver and very positively received. Positive change was evident on all items immediately before and after training, and reached significance for Knowledge, with a trend towards significance for Satisfaction. Change in Attitude and Knowledge was maintained and built upon at follow-up, and attenders demonstrated superior knowledge and attitudes compared to non-attenders. Skills did not differ significantly between the groups, although mean scores very marginally favoured attenders. This may be partially due to a self-selection bias in both attenders and control participants, in that those with more confidence in their communication skills may have been more likely to agree to the additional behavioural assessment. The significant results were associated with medium to large effect sizes, suggesting a meaningful impact of the training upon workforce development. Qualitative comments reflected that attendees valued the experiential learning in the clinical scenarios, and found that the training gave them greater insight into the difficulties experienced by people with psychosis.

Workplace satisfaction had reduced at follow-up for attenders, and was non-significantly lower than for non-attenders. Qualitative comments did not offer an insight into the reasons

for this, but we tentatively hypothesise that organisational changes may have influenced scores. At the time of delivering the training, a review of administrative posts was planned, and staff were hopeful that this would present opportunities for upgrading. By follow-up, the review had been implemented, and had resulted in the loss of a number of posts, and no upgrading opportunities. It is plausible that the message of the importance of front-of-house staff to the organisation, which was a key part of the training, had differentially raised expectations in course attendees, causing greater disappointment after the service restructure. The backdrop of organisational change in the NHS should therefore be carefully considered for future training: a resilience to change stance is likely to be preferable to inadvertently inculcating an expectation of improvement.

Limitations

Several limitations of the present study should be noted. First, in order to preserve the anonymity of attendees, very little data were collected on demographic factors which may have impacted on the effectiveness of training, such as age, prior education and work settings. No information was gathered on the number or characteristics of staff who were approached by a business manager but declined to participate, and the nature of recruitment makes the sample unlikely to be fully representative of the front-of-house workforce. No pre-workshop data were collected for control attendees, and the control group was selected for convenience, without randomisation. Positive feedback and validation may have biased attendees' views of the workshop; however, we considered an understanding of the importance of their role to be crucial to the rationale for the training. The follow-up period was variable and extended to a year for some participants, which may have impacted upon retention of learning. Only a quarter of the original attendees provided follow-up data, and inferences about longevity of change are therefore subject to potential bias in the retention of attendees at follow-up. The pre-post design limits the possibilities for assessing the effectiveness of specific components of the workshop. Nevertheless, our

promising results justify a larger cohort study, which could include more qualitative evaluation of the process of change for staff. The impact on service users was not directly measured in this study, but will be a focus of future research.

Conclusions

The present study demonstrated the beneficial effects of a training workshop aimed at front-of-house staff working in psychosis services in raising awareness of the importance of communications skills and improving knowledge about psychosis. Future training would be enhanced by greater involvement of both front-of-house staff and service users in the design and delivery of training, including formal surveys of perceptions of potential targets for improvement. Future evaluation should employ a randomised controlled design to test the effect of training upon clinical communication skills, and whether improved clinical communication impacts positively on the service user experience.

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Table 1: Staff feedback on the training

Post workshop questionnaire comments
What was one good thing about the course?
1) <i>It highlights the problems psychotic patients go through in real life</i>
2) <i>Very useful practical exercises and feedback. Observing others helped show what works and doesn't work and allowed useful comparisons to be drawn about what I do</i>
3) <i>I felt that experiential learning, i.e. role play, was excellent</i>
4) <i>The course brings to life the feelings service users may experience when "hearing voices" and aids the understanding [...] of their needs from carers and staff</i>
What was one thing for us to improve on in the course?
1) <i>Have a role play situation involving other non-clinical staff</i>
2) <i>Maybe more detail of specific communication techniques</i>
3) <i>Possibly useful to role-play aggressive or challenging behaviour as well</i>
4) <i>Video the role plays so person could see themselves, see how they could improve</i>
Any other comments?
1) <i>I really feel this training should be mandatory for administrators & receptionists</i>
2) <i>I recommend that all administrators are encouraged to attend this workshop</i>
3) <i>Very helpful training, recognise significant differences in services delivery at sites</i>
Follow-up questionnaire comments
1) <i>I thought the workshop was excellent. I found it informative and user friendly. I particularly appreciated the fact that there was a lot of experiential learning involved. Having had actors playing roles of patients made presented scenarios come alive.</i>
2) <i>I really did enjoy the workshops but things are generally the same. I just work the same way I was working before I went on training. I listen to people's issues a lot and I don't judge.</i>
3) <i>Training increased my understanding of symptoms patients might be experiencing. This increased my competence and confidence in working with patients as well as my ability to empathise.</i>
4) <i>I think that this course was very valuable and it would be great to have it as a mandatory course as often the people who want to go on these courses willingly are not always the one's that need to go on them.</i>

Table 2: Knowledge items and mean item change in Cohen's d

Question	Cohen's d
Psychosis can be caused by lots of different factors	.59
Medication can be very helpful for some people	.00
People with psychosis are often anxious and depressed	.21
Psychosis can happen to anyone	.32
*It is better to tell someone directly that their beliefs are not true, if they say something unusual	.20
*People bring psychosis upon themselves	.29
Carers of people with psychosis often need support in their caring role	.23
People with psychosis can recover	.31
Voices and unusual beliefs are quite common in the general population	.61
It is important to be open minded about people's beliefs and culture	.30
Talking therapies can be helpful for people with psychosis	.27
*The role of mental health services is to get people with psychosis to accept that they have a mental health problem, and take their medication	.11
*Relapses are usually the person's own fault	.09
*People with psychosis should withdraw from normal life to avoid stressing themselves	.15
Medication can have unpleasant side effects and is not always very helpful	.15
Total	.57

*Reverse scored item – higher score indicates less understanding

Table 3: Mean questionnaire ratings for attendees pre and post training, and for attendees and non-attenders at follow-up

Scale (Range)	Mean (SD)			
	Pre (n=43)	Post (n=43)	Follow-up (n=11)	Control (n=12)
Attitude (11-55)	49.6 (10.2)	52.3 (6.8)	53.8 (1.0)	49.9 (5.2)*
Knowledge (15-75)	60.6 (5.6)	63.7 (5.4)***	65.8 (4.7)	59.8 (5.1)**
Satisfaction (6-30)	23.9 ¹ (4.3)	25.2 ¹ (3.3)	23.1 (4.8)	26.0 (4.0)
Skills (15-75)	-	-	57.9 ² (14.5)	56.5 ² (5.1)

*Key: SD=standard deviation. * $p<0.05$; ** $p<0.01$; *** $p<0.001$; ¹ $n=39$; ² $n=7$.*