

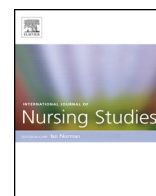


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A communication skills intervention for community healthcare workers: Perceived patient aggression is reduced

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ABSTRACT

Background: Previous studies have shown that healthcare workers experience high levels of aggression from patients. Prevention packages to address this have received little research support. Communication skills have been shown to influence individuals' experience of aggression and are also amenable to training.

Objectives: This study aims to deliver a communication skills training package that will reduce the experience of aggression in the workplace for healthcare workers.

Design: An interactive, multimedia communication skills package was developed that would be suitable for community healthcare workers. The training consisted of four workshops, including teaching, discussion and DVD illustrative examples. These were based on research and clinical experience.

Settings: This intervention was delivered in two community care organisations over several months.

Participants: Fifty-six community healthcare workers took part in the trial in small groups. There were 46 females and 10 males with a median age of 45–54 years.

Methods: For each group a series of four communication skills workshops were given. Measurements of perceived aggression and wellbeing were taken before the workshops, at the end of the workshops, one month after and two months after.

Results: Results show statistically significant reductions in perceived aggression one and two months after baseline measures ($p < 0.01$). Results also suggest reductions in distress and increases in general mental wellness ($p < 0.01$). Evaluation of the programme by participants was positive.

Conclusions: A brief communication skills training programme is both enjoyable and shows decreases in perceived aggression, distress, and increases in general mental wellness. A full RCT of this intervention is warranted.

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What is already known about the topic?

- Patient aggression towards healthcare workers and community nurses is prevalent and well recognised internationally.
- Prevention of aggression by patients is difficult and not well studied.

- One factor that contributes to the experience of aggression is communication.

What this paper adds

- A multimedia communication skills training programme for healthcare workers was developed.
- The short intervention was effective at reducing aggression and improving wellbeing.
- Rates of aggression towards healthcare workers are high, but the majority of workers showed low or moderate levels of distress and reasonable wellbeing.

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1. Introduction

Workplace violence and aggression is a hazard in many professions. Healthcare workers, however, seem particularly vulnerable to acts of aggression (Jackson et al., 2002; Winstanley and Whittington, 2004). Recent New Zealand data suggests 94% of nurses' report experiencing verbal aggression in the previous year (Greenwood et al., 2014). A recent review of research reported a more conservative 15–75% of respondents in clinical medical practice experienced verbal aggression in the previous 6–24 months (Hills and Joyce, 2013). A review of patient initiated violence towards GPs in Australia and New Zealand reported between 15 and 62% of GPs had experienced verbal abuse in the previous year (Parker et al., 2010). Data from community health workers suggests a similarly high rate of verbal aggression (66%; Gale et al., 2009).

Many things can cause a patient to become aggressive. A meta-analysis reported that most violent incidents in inpatient psychiatric settings were caused by staff–patient interactions (Papadopoulos et al., 2012). Within these interactions, limiting patients' freedoms was the most frequent precursor of incidents. The conclusion that staff contribute towards triggering an aggressive act, leads to the conclusion that prospective interventions increasing the skills of staff could potentially reduce aggression. Parker et al. (2010) concluded that, in the case of Family Doctors/General Practitioners, patient frustration may be the major cause of verbal abuse, but the only available management was to implement physical safety measures.

Research on aggression prevention in healthcare is scarce. A review suggests our best preventative efforts will be gained from improvements in environmental policies, administrative and management strategies, and organisational policy changes (Hills and Joyce, 2013). In some countries there is mandatory training aimed at reducing violent incidents, but the effectiveness of these programmes has not been established (Bowers et al., 2006). Only 30% of workers in a recent study felt the organisation they worked for had prepared them well for aggression from patients (Franz et al., 2010). A review by Hills and Joyce (2013) suggests that although education and training initiatives to reduce aggression are universally recommended, research in the area is generally absent or poor and "there remains a need for more rigorous evaluation research on aggression minimisation training in medical and other health professions" (p. 563).

Such workplace anti-violence training or more general communication skills training has been found to be an important variable in the risk of aggression (Gale et al., 2009; Gillespie et al., 2010). Several other studies have identified particular communication styles as a trigger for conflict (Rew and Ferns, 2005; Papadopoulos et al., 2012). Some research using communication skills training to reduce conflict is beginning to emerge and, although still in pilot stages, shows promising results (McLaughlin et al., 2013).

It is evident that more research is needed into the effectiveness of aggression prevention training programmes. To address this research need and also a practical need for effective training we developed a

communication skills workshop package for community based healthcare workers. Previous research suggests that a didactic approach to skill acquisition is less effective than more multimedia types of approaches (McLaughlin et al., 2013). Our hypothesis is that a brief multimedia, interactive, communication skills training programme will lead to a decrease in experience of aggression towards a group of healthcare workers. We also hypothesise that general mental health will improve along with a reduction in the impact of stressful events on the community healthcare workers following the communication skills training programme.

2. Method

2.1. Recruitment

Four community healthcare organisations in the local area were consulted. Two refused, and two consented to take part. Participants were approached at a regular staff meeting and invited to participate in the research. Numbers who responded and locations led to the formation of six groups, consisting of between 7 and 12 people. There were 56 participants, 46 of whom were female. Ages ranged from under 25 to over 65 with a median and mode of 45–54 years. Twenty-four worked in physical disability, 46 in intellectual disability, 48 in mental health, 16 in old age care – meaning most people worked in more than one care area. Only 10 participants worked less than 35 h per week. Fourteen healthcare workers had a degree level qualification.

2.2. Instruments

2.2.1. POPAS-NZ

The perception of patient aggression scale (POPAS) is a brief outcome scale for interventions around the perceived level of violence. It asks 12 questions related to the experience of aggression in the previous year. Answers correspond to how frequently each type of aggression was experienced.

Before beginning our intervention a test of the psychometric properties of this measurement instrument was conducted. 227 participants who worked in a hospital setting were recruited for this trial. The POPAS-NZ was tested twice, four weeks apart. A Spearman's Rank Order correlation was run to determine the relationship between each POPAS-NZ test. There was a strong, positive correlation between the POPAS-NZ at each time period, which was statistically significant ($r_s = .65, p < 0.05$). It was also tested against a well validated test of aggressive behaviour, the MOAS (Sorgi et al., 1991; Oliver et al., 2007) and there was again a strong positive correlation, which was statistically significant ($r_s = .65, p < 0.05$). The POPAS scale has high internal validity, with Cronbach's alpha of 0.89.

2.2.2. Kessler-10

This is a measure of general mental wellness, that was included in both the Australian and NZ Mental Health Surveys and has normative data for Australia (Hides et al., 2007) and New Zealand (Oakley Browne et al., 2010).

2.2.3. Impact of events scale – revised (IES)

This is a measure of emotional distress from an event in the week of the survey. High scores have been correlated with clinically significant post traumatic stress disorder. It is a valid and reliable measure (Sundin and Horowitz, 2002). There is no specific cut-off value.

2.3. Development of communication skills programme

We developed a fully scripted set of four 50–75 min sessions with a manual and DVDs of illustrative interactions. The intervention was based on 6 years (N.S.) and 8 years (C.G.) of teaching of communication skills to medical students, as well as previous research and professional practice. Professional actors were used to create the examples presented on DVD. A Facilitators Guide and a Participant's Guide were developed. See Table 1 for topics covered by the programme.

The four sessions were conducted weekly in work hours at the usual place of work. Each was delivered by one of the researchers (C.G.) according to the manual. Participants were given an 18-page guidebook in the first session, that was theirs to keep. Participants were asked to fill in the surveys by a research assistant four times: at the first intervention session (baseline), after the last intervention session (post), one month after the last session (one month) and two months after the last session (two months).

Ethical approval was gained from the Southern HDEC (LRS11/04/016), all participants were fully informed and signed consent sheets.

2.4. Analysis

Analysis was conducted using IBM SPSS Statistics for Windows, version 20. A test of skewness showed all three outcome measures (POPAS-NZ, Kessler-10, and IES) were significantly skewed to the right. Therefore, medians are reported and the non-parametric test, Friedman test, was conducted. If significant, a post hoc Wilcoxon signed-rank tests using a Bonferroni adjustment was applied.

3. Results

3.1. The POPAS-NZ

The POPAS-NZ shows a decline in reported aggression at each time period. There was a statistically significant difference in POPAS-NZ scores, $\chi^2(2) = 21.7$, $p < 0.01$. Post hoc analysis with Wilcoxon signed-rank tests was conducted with a Bonferroni correction applied, resulting in a significance level set at $p < 0.003$. Median scores on POPAS-NZ were 5, 4, 2, and 1, respectively. There were no significant differences between the Baseline and post scores ($Z = -1.5$, $p = 0.12$). However, there were statistically significant reductions between baseline and one month, and baseline and two month respectively ($Z = -3.7$, $p < 0.000$ and $Z = -4.0$, $p < 0.000$).

3.2. The impact of events scale (IES)

There was a statistically significant difference in IES scores, $\chi^2(2) = 43.4$, $p < 0.01$. Post hoc analysis with

Table 1

An outline of the intervention programme called "It's all about communication".

Session number	Time taken	DVD examples	Topics covered
1	75 min	5	Non-verbal cues Verbal cues Body language Mirroring
2	50–60 min	3	Managing discomfort Group dynamics Open and closed questions Empathy Setting agendas
3	50–60 min	3	Control and Structure Working in pairs Difficult situations, worries and concerns
4	50–60 min	3	What to do when things go wrong Communication break-downs Taking care of ourselves

Wilcoxon signed-rank tests was conducted with a Bonferroni correction applied, resulting in a significance level set at $p < 0.003$. Median scores on IES were 8, 4, 2, and 0.5, respectively. There were significant differences between the baseline and each of the three time periods, post, one month, and two months ($Z = -3.7$, $p < 0.000$; $Z = -3.7$, $p = 0.001$ and $Z = -5.5$, $p < 0.0001$).

3.3. The Kessler-10

There was a statistically significant difference in Kessler-10 scores, $\chi^2(2) = 13.4$, $p < 0.01$. Post hoc analysis with Wilcoxon signed-rank tests was conducted with a Bonferroni correction applied, resulting in a significance level set at $p < 0.003$. Median scores on the Kessler-10 were 5, 4, 3, and 2, respectively. There were no significant differences between the baseline and post test scores ($Z = -0.9$, $p = 0.37$) or the baseline and one month scores ($Z = -2.3$, $p = 0.02$). However, there were statistically

Table 2

Scores on each of the three outcome measures, before the intervention, immediately following, one month and two months after the intervention.

Measure	Time	Median	Mode (n)	Range
POPAS	Baseline	5	0 (11)	0–26
	Post	4	0 (12)	0–24
	One-month	2*	0 (20)	0–15
	Two months	1*	0 (20)	0–24
IES	Baseline	8	0 (9)	0–68
	Post	4*	0 (15)	0–47
	One-month	2*	0 (17)	0–50
	Two months	0.5*	0 (28)	0–33
Kessler	Baseline	5	6 (9)	0–15
	Post	4	0 (9)	0–16
	One-month	3	0 (14)	0–21
	Two months	2*	0, 2 (11)	0–13

* Statistically significant change from baseline.

significant reductions between Kessler-10 baseline and two month scores ($Z = -3.2, p = 0.001$) (Table 2).

Participants were asked to rate the communication skills training programme on the final day. The question was: "Overall how would you rate the course?", 84% of people responded that the course was excellent or very good.

4. Discussion

Previous research has reported high levels of aggression experienced by all types of healthcare workers (Jackson et al., 2002; Winstanley and Whittington, 2004). The present study sought to evaluate a communication skills training programme designed to reduce the experience of aggression in community healthcare workers. The programme developed was successful in all areas measured. It reduced the experience of aggression, reduced emotional distress, increased mental wellbeing and was rated positively by participants.

Rates of aggression were significant. Early work using a larger sample of community healthcare workers had established a mean total score on the POPAS-NZ of 5 (Gale et al., 2009). The present results report a median of 5. This represents reporting of either very frequent but less serious types of aggression, or less frequent but more serious types of aggression. Results of this intervention suggest that immediately following a course on communication this experience of aggression begins to decrease. It continues to decrease over the two months following the course. The POPAS-NZ asks about aggression experienced over the previous year, so statistically significant drops of aggression experienced one month after the intervention provide a meaningful change.

Results indicate a high level of mental wellbeing and little effect of traumatic events. At the baseline most people reported a low or moderate level of distress (IES) and low Kessler scores, indicating reasonable wellbeing, but there were some people who reported a marked amount of distress (IES) and impairment in general wellbeing (Kessler). Nonetheless the communication skills training programme was able to improve measures of wellbeing and distress. The communication skills seem to have an immediate effect after the course, and then, over the further two months, the effect of the course increases.

The communication skills training programme was well liked by participants. Previous research had suggested that multimedia type approaches would be most effective to teach communication skills to healthcare workers (McLaughlin et al., 2013). The approach employed used workbooks, didactic teaching, interaction and DVD examples of good and bad communication that could be paused and commented on. This multi-modal approach may be why the majority of participants rated the programme as excellent or very good.

Limitations of this research include choice of measures and lack of suitable control. It may be that any intervention aimed to help experience of aggression may have been effective. A control group taking the same amount of time as the intervention is necessary to eliminate this possibility. Also of note is that the intervention was designed to

teach communication skills and no measure of these skills was taken. So although the programme was liked by the participants, and reduced the experience of aggression, it is not known whether communication skills had been improved or to what extent. A longer follow-up would also be informative, as the effect of training seems to increase over time.

The results from this trial present a promising intervention for the reduction of workplace aggression. Research in this area has been absent or poor (Hills and Joyce, 2013) so this current research will add to the growing body of research both the effectiveness of communication type interventions and the components of such programmes. While this research suggests the programme is effective in the community healthcare setting, additional possibilities exist for use throughout the health sector. A randomised controlled trial with long-term follow up would be useful to establish the success of this communication skills training programme to reduce patient aggression towards healthcare workers.

Conflict of interest

None declared.

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Ethical approval

Ethical approval was gained from the Southern HDEC (LRS11/04/016), all participants were fully informed and signed consent sheets.

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