Effectiveness of assertive communication training programs for health professionals and students: a systematic review protocol

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Review question/objective: The objective of this systematic review is to identify, appraise and synthesize the best available evidence related to the effectiveness of assertive communication training programs in healthcare. More specifically, the objective of this systematic review is to determine the effectiveness of assertive communication interventions for health professionals and students on levels of assertiveness, communication competence and impact on clinician behaviors compared to alternative or no interventions.

Keywords Assertiveness; communication; health professional; speak up; training

Background

Assertiveness training has recently been drawing renewed interest in relation to patient safety in health care because communication failure has become one of the major causes of adverse incidents.¹,² Assertiveness is an essential interpersonal behavior that aims to minimize power differences between individuals. Alberti and Emmons³ identified assertiveness as a behavior that enables individuals to act in their own best interests, to stand up for themselves without undue anxiety, to express their feelings honestly or to exercise their rights without denying the rights of others. Assertiveness is also viewed as an ability to speak up for one’s concerns⁴ and share privately held information with people in a position of authority.⁵

In healthcare settings, assertiveness focuses on the clinicians’ ability to communicate their views and concerns as patient advocates and is an attribute that supports and encourages successful interprofessional communication and collaboration.⁶ Assertiveness is a vital skill in contemporary health care and an essential component for positive and productive working relationships between staff.⁷ For the purpose of this review, assertiveness refers specifically to health professionals being able to respectfully express their opinions and concerns regarding patient care to other health professionals including those in authority.

Assertiveness is often mistaken for aggressiveness; however, aggressiveness involves the inappropriate expression of views and emotions in a manner that ignores the rights of others.³ Assertiveness also differs from passive or submissive behaviors, which allow others to violate one’s rights.⁸ Some researchers suggest that passive aggression while disguised by passivity, is a form of aggressiveness.⁹ The negative consequences of passiveness and aggressiveness include personal anguish, disappointment and even self-recrimination.³ If individuals consistently behave in these ways, they could become stressed and burned out. Also, persons who lack assertiveness are vulnerable to workplace violence.¹⁰ Therefore, assertiveness is important for maintaining mental wellbeing, especially for people who work in stressful conditions such as health professionals.

Healthcare requires effective interaction with patients, families, colleagues and members of the multidisciplinary team within complex and dynamic environments. Health professionals require well developed communication skills to ensure that these interactions promote and maintain patient safety.¹¹ They need the ability to advocate for patients and escalate their concerns when patient safety is
In such relationships and team dynamics do not always support and encourage health professionals to be assertive in communicating with others in the team.  

In such cultures, health professionals may use avoidance or accommodating behaviors to negotiate conflict rather than assertive behaviors.  

They may also concede to people in power and authority, rather than make their views known.  

Such lack of assertiveness may result in unsafe practices.

Health professional students need to learn assertive communication skills to effectively interact with patients, families and other health professionals. Deltsidou surveyed the level of assertiveness in undergraduate nursing students in Greece and warned that students with a low level of assertiveness and self-esteem may display negative professional behaviors when they become registered nurses and recommended that their assertiveness training should begin in undergraduate education.

Assertive communication training has been linked with improvements in assertiveness and can be delivered as an education program to help participants develop assertiveness, improve their views of themselves and form equal relationships with others. The training can take many forms such as lecture, demonstration, group discussion and role-play that uses clinical scenarios by face-to-face or e-learning approaches. It can be delivered by clinical educators, faculties or other qualified trainers. Assertive communication training has also been reported to have positive effects on health professionals’ wellbeing by increasing satisfaction, self-esteem and reducing stress.

In addition, it has been utilized in the aim of conflict resolution and as a coping strategy for bullying.

In recent years, assertive communication training has been included in the teaching of team skills and strategies to reduce health errors and improve patient safety. The study by Sayre et al. demonstrated that this strategy to improve clinicians’ assertive communication could increase speaking up behaviors, potentially leading to better patient outcomes. In addition, Lin et al. and Unal reported positive impacts of an assertiveness training program on assertiveness and self-esteem of medical and nursing students. In contrast, some researchers have used educational interventions focused on structured communication tools, such as introduction, situation, background, assessment and recommendation, and found this technique also effective in improving assertive communication.

Although many studies identify the importance of assertiveness and links with improvements in assertiveness overall, there is a lack in critical reviews that appraise and synthesize the evidence to determine the effectiveness of assertive communication training programs, specifically for health professionals and students. Therefore, this review will attempt to synthesize the best available evidence of the effectiveness of interventions designed to improve assertive communication of health professionals and health students.

A preliminary search was conducted in July and August 2015 to identify existing systematic reviews and protocols in databases, including the JBI Database of Systematic Reviews and Implementation Reports, the Cochrane Library, MEDLINE, CINAHL and PROSPERO. There were two reviews and two review protocols on communication skills training. One review protocol intended to evaluate the effects of simulation training on communication skills, but only for anesthesia providers in the operating room environment. There were also several reviews: a review related to the effectiveness of communication skills training in health care, a review evaluating the effectiveness of training clinicians in communication skills on patients’ clinical outcomes and another protocol on the effectiveness of tools and methods of teaching communication skills to health professional students.

However, none of these addressed assertiveness as a core element. A systematic review of the effectiveness of communication training that focuses on the assertiveness of health professionals and health students has not yet been conducted. Therefore, there is a pressing need to examine the best available evidence in relation to the effectiveness of assertive communication training for health professionals and health students.

**Inclusion criteria**

**Types of participants**

The current review will consider studies that include health professionals and health professional students regardless of healthcare setting, level of qualification or education.

**Types of intervention(s)/phenomena of interest**

The current review will consider studies that evaluate assertive communication training programs of any
type, including e-learning, compared to alternative interventions or no intervention. Studies that consider assertiveness interventions regardless of the length of training and the facilitator will be included. Interventions can be a part of communication training or team skills with multiple contents and delivery methods such as lecture, demonstration, group discussion and role-playing that uses clinical scenarios. In the considered studies, assertiveness will be a core element of the training but may not be the sole component.

Outcomes
The current review will consider studies that include the following outcome measures:

The primary outcomes will be level of assertiveness measured by validated assertiveness measurement tools such as, but not limited to, the Rathus Assertiveness Scale and the Assertiveness Inventory, and level of communication competence measured by validated tools and surveys such as, but not limited to, the Self-Perceived Communication Competence Scale and the Interpersonal Communication Competence Scale.

Secondary outcomes will be the level of impact on clinician communication measured by any observer-based rating scales; behaviorally anchored rating scales, those which compare an individual’s performance against specific examples of behavior that are anchored to numerical rating; or impact on patient outcomes/safety. Clinician communication failure is one of the major causes of adverse incidents and measures of this may include numbers and severity of incidents and near misses.

Types of studies
The current review will consider all quantitative study designs including randomized controlled trials, non-randomized controlled trials, quasi-experimental studies, before and after studies, prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies for inclusion.

Search strategy
The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of MEDLINE and CINAHL will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Third, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English will be considered for inclusion in this review. The interest in assertiveness training had been renewed as a strategy to improve patient safety since communication breakdown was identified as a major cause of adverse events in health care in the last decade. Studies published from 2001 will be considered for inclusion in this review.

The databases to be searched include: CINAHL, Cochrane Library (including CENTRAL), EMBASE, Informit health collection, MEDLINE, ProQuest nursing and allied health, PsycINFO, Scopus and Web of Science.

The search for unpublished studies will include: MedNar, ProQuest Dissertations & Theses A&I.

Initial keywords to be used will be: assertive*, speak*, silence, communicat*, train*, teach*, educat*, (staff or professional) development, health (profession* or personnel*), physician*, doctor*, resident*, intern*, nurs*, midwi*, pharmacist*, allied health, student*

Assessment of methodological quality
Papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Meta-Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Data extraction
Data will be extracted from papers included in the review using the standardized data extraction tool from JBI-MAStARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

Data synthesis
Quantitative data will, where possible, be pooled in statistical meta-analysis using JBI-MAStARI. All results will be subject to double data entry. Effect
sizes expressed as odds ratio (for categorical data) and weighted mean differences (for continuous data) and their 95% confidence intervals will be calculated for analysis. Heterogeneity will be assessed statistically using the standard chi-square and also explored using subgroup analyses based on the different study designs included in this review. Where statistical pooling is not possible, the findings will be presented in narrative form including tables and figures to aid in data presentation where appropriate.

Acknowledgements
The authors thank Debbie Booth, Faculty of Health Librarian, Library Services, The University of Newcastle for assistance with the search strategy.

References
Appendix I: Appraisal instrument

**MAStARI appraisal instrument**

### JBI Critical Appraisal Checklist for Randomised Control / Pseudo-randomised Trial

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was the assignment to treatment groups truly random?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>2. Were participants blinded to treatment allocation?</td>
<td>☐</td>
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<td>3. Was allocation to treatment groups concealed from the allocator?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>4. Were the outcomes of people who withdrew described and included in the analysis?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>5. Were those assessing outcomes blind to the treatment allocation?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<td>6. Were the control and treatment groups comparable at entry?</td>
<td>☐</td>
<td>☐</td>
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<td>7. Were groups treated identically other than for the named interventions</td>
<td>☐</td>
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<td>8. Were outcomes measured in the same way for all groups?</td>
<td>☐</td>
<td>☐</td>
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<td>9. Were outcomes measured in a reliable way?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>10. Was appropriate statistical analysis used?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</table>

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (including reason for exclusion)

____________________

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JBI Critical Appraisal Checklist for Comparable Cohort/ Case Control

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>Not Applicable</th>
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</thead>
<tbody>
<tr>
<td>1. Is sample representative of patients in the population as a whole?</td>
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<td>2. Are the patients at a similar point in the course of their condition/illness?</td>
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<td>3. Has bias been minimised in relation to selection of cases and of controls?</td>
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<td>4. Are confounding factors identified and strategies to deal with them stated?</td>
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<td>5. Are outcomes assessed using objective criteria?</td>
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<td>6. Was follow up carried out over a sufficient time period?</td>
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<tr>
<td>7. Were the outcomes of people who withdrew described and included in the analysis?</td>
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<td>8. Were outcomes measured in a reliable way?</td>
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Overall appraisal: Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)
Appendix II: Data extraction instrument

MASATARI data extraction instrument

### JBI Data Extraction Form for Experimental / Observational Studies

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
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<tr>
<td>Reviewer</td>
<td>Date</td>
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<td>Author</td>
<td>Year</td>
</tr>
<tr>
<td>Journal</td>
<td>Record Number</td>
</tr>
</tbody>
</table>

**Study Method**

- [ ] RCT
- [ ] Quasi-RCT
- [ ] Longitudinal
- [ ] Retrospective
- [ ] Observational
- [ ] Other

**Participants**

1. **Setting**
2. **Population**

**Sample size**

1. Group A
2. Group B

**Interventions**

1. Intervention A
2. Intervention B

**Authors Conclusions:**

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**Reviewers Conclusions:**

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### Study results

#### Dichotomous data

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Intervention ( ) number / total number</th>
<th>Intervention ( ) number / total number</th>
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#### Continuous data

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<th>Outcome</th>
<th>Intervention ( ) number / total number</th>
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