

## How We Can Enhance Nurses' Assertiveness: A Literature Review

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### Abstract

**Objective :** Assertiveness is important for effective team building in nursing. This article aims at evaluating the results of the previous studies on nurses' assertiveness in each decade in order to discuss the possible ways for enhancing nurses' assertiveness.

**Methods :** Five databases (PubMed, MEDLINE, CINAHL, Web of Science, and the Cochrane Library) were searched for English-language articles published from 1946 to December 2012. Article which described the assertiveness of nurses and relevant factors related to assertiveness in a clinical setting or evaluated assertiveness training.

**Results :** Twenty-five studies in 26 articles were identified. In the 1970s and 1980s, research demonstrated that nurses perceived they are submissive helper and were less assertive. These studies indicated that educational achievement was regarded as a key factor in nurses' assertiveness. The study in 1990s demonstrated that at least one population of nurses was assertive. The studies after 2000 suggested that nurses behave in a passive way, conforming to the stereotype of a 'nice' nurse, and were less likely to disagree with others. A sense of responsibility for patients, managers' leadership, organisational culture, and relationship between colleagues were reported as influencing factors of nurses' assertiveness.

**Conclusion :** Recently, the number of nurses who are trained in higher educational institutions has increased. Despite this, nurses still experience some difficulties assessing themselves. Nurses should understand their role at the recent health care environment as a professional. Nurse managers should take a leadership to avoid nurses' concerns of voicing their opinions in order to improve nurses' assertiveness.

**Keywords:** Assertiveness; Interdisciplinary communication; Quality of health care; Systematic review

### Introduction

Nursing surveillance and monitoring activities are essential for the patient care [1]. Nurses require the competence of clinical grasp (e.g. what is happening to a patient) and clinical forethought (e.g. prediction for patient condition) for providing patient appropriate care [2]. Nurses are expected to show clinical leadership at the patient bedside to provide direction and support to patients and the health care team for integrating the care they provide to achieve positive patient outcomes [3]. If necessary they assert their opinions to other team members for changing the care plan for their patients [2]. On the other hand, it has been shown that those who are aware of a problem often either speak up and are ignored or do not speak up at all [4,5].

Assertiveness is a style of communication that enables nurses to build effective team relationships. Collaboration with other team members needs both a high level of assertiveness (meeting the own need) and a high level of cooperation (meeting the other's need) [6].

Assertiveness is described as expressing thoughts and feelings without denying the rights of others [7]. Nurses' ability to be assertive when they are unsure or concerned about medical procedures, the treatment of patients, or symptoms of patients is key in reducing risk and preventing major medical errors [8]. Assertive people inform others of their needs and feelings, and communicate their message effectively without causing offence to others [9]. When nurses act assertively, they are more likely to provide patients appropriate care, and in doing so, improve the quality of patient care [2,9].

Traditionally, nurses tend to be female and their role involves assisting a doctor. As they play a supporting role, they are often placed lower in the medical hierarchy, and it makes nurses difficult to assert their own opinions for the patient care. Recently nurses' role in the clinical setting is changing. Since the Institute of Medicine published the report of 'The Future of Nursing: leading change, advancing health' in 2011, nurses are expected to act as partners with other health care professionals and to lead in the improvement and redesign of the health care system [10]. In addition, nurses are crucial in preventing medical errors, reducing rates of infection, and even facilitating patients' transition from hospital to home [10]. It means that nurses

are expected to acquire assertiveness in order to work effectively with other health care professionals.

Lyndon conducted a literature review of nurses' assertiveness and teamwork, and reported that two studies of assertiveness showed conflicting results [11]: Gerry in 1989 found that nurses rated themselves more assertive outside of work than at work and demonstrated a trend toward conflict avoidance [12], while Kilkus in 1993 found that nurses had mean scores in the moderately assertive [13]. She concluded that findings regarding nurses' assertiveness were mixed [11]. She evaluated the results of the previous studies on nurses' assertiveness using only six articles, and did not take into account the changes of nurses' work environment. Therefore, this review aims at evaluating the results of the previous studies on nurses' assertiveness each decade in order to discuss the possible ways for enhancing nurses' assertiveness.

## Methods

This review was conducted as a part of systematic review for health care professionals' voicing behaviour. In the process of the literature review, we found two types of articles pertaining to clinicians' communication behaviour: the first focussed on speaking-up behaviour related to patient safety (i.e. when clinicians are aware of risky or negligent actions of others within health care teams) and the second investigated the assertiveness of nurses more generally, without focusing on patient safety issues. This article summarises the literature on the latter type of assertiveness in nurses and discusses a strategy to enhance team communication. Our findings on speaking up behaviours in situations related to patient safety are reported elsewhere [14].

### Search methods

Relevant articles published in English from 1946 until December 2012 were searched using PubMed, MEDLINE, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Web of Science, and the Cochrane Library (date last searched 24 December 2012). Combinations of terms were used to find articles related to assertiveness (i.e. speak\* up, speak\* out, assertive\*), inter-professional relations (i.e. inter-professional relations, doctor-nurse relationships), health personnel (i.e. health personnel, patient care team, nursing-supervisory, attitude of health personnel, professional role, professional practice), and patient safety (i.e. risk management, safety, medical errors, malpractice, professional misconduct, quality of health care, outcomes and process assessment, program evaluation, quality of health care, outcome and process assessment, program evaluation, quality assurance, consumer satisfaction, doctor's practice patterns, nurse's practice patterns, practice management) . Medical Subject Headings were used where available. The search was conducted with the assistance of experts in the use of such databases.

Moreover, a manual search (that involved reading the title of each paper in the journal's archives) was conducted to find relevant papers on organisational research and nursing management in the *Journal of Nursing Management* and the *Journal of Organizational Behavior*. The referenced articles listed in each of the selected publications were also examined.

To obtain a wide variety of research evidence, this review prioritised articles that appeared to be relevant to nurses' assertiveness rather than particular study types or articles that met particular methodological standards [15]. Both quantitative and qualitative studies were included

in this review. Articles that were selected for use in the review either described the assertiveness of nurses and relevant factors related to assertiveness in a clinical setting. In addition, articles which evaluated the assertive training using the comparative study design were also selected, while articles that described training programmes without any results or expert validation were excluded. Review article of nurses' assertiveness were also excluded, and here original articles which mentioned in the review were used for the analysis. At first, we searched for assertive behaviour associated with doctors, medical residents, and nurses. However, we did not find any research articles on the assertive behaviour of doctors and medical residents, using our criteria. Therefore, this article deals with only the literature concerning assertive behaviour in nurses.

Two independent reviewers (AO, and a research assistant) reviewed the titles and abstracts of citations generated by the search to assess their eligibility for further review based on the selection criteria. They selected relevant articles for possible inclusion. Cohen's kappa was calculated to assess the degree of agreement between both reviewers. The reviewers assessed all of the selected articles in relation to the criteria and decided independently which articles to include in this study. In the case of disagreement between the two reviewers, the article was discussed with the other two authors (CW, BB).

### Search outcome

The initial search identified 2,941 citations. Most of the excluded 2,649 articles were based solely on expert opinions and commentary, or did not study assertiveness in health care teams. In total, 292 articles meeting the inclusion criteria were selected for detailed review (Figure 1). Following a title and abstract review by the aforementioned two reviewers, Cohen's kappa was calculated as 0.64.

Twenty articles dealt with the assertiveness of nurses. In addition, five other articles were retrieved from article reference lists, and one article was found using a manual search. In total, 25 studies in 26 articles were identified for this study. Nine articles (35%) were published after the year 2000. Fifteen studies (60%) came from the U.S., and of the remaining ten, eight originated from Japan, Australia, Canada, and Ireland (two from each of these countries).

### Quality appraisal

The following criteria were used to assess primary study quality: (1) the aims and objectives of the research are clearly stated, (2) the design is clearly specified and appropriate for the aims and objectives of the research, (3) the researchers provide a clear account of the process by which their findings were reproduced, (4) the researchers include enough data to support their interpretations and conclusions, and (5) the method of analysis is appropriate and adequately executed [15]. In addition, we evaluated the study on the training intervention using the modified Best Medical Education Coding sheet (e.g., study design, participants allocation, outcome level (Kirkpatrick level))[16]. The results of the study appraisal are shown in each table.

### Data abstraction

Two reviewers independently abstracted the data from the selected articles (e.g. study aim, design, method, results, and country where the study was conducted).

### Synthesis

Nurses' assertiveness may influence on the trend of the times (e.g. nurses' work environment), therefore, themes emerged for each decade that research on assertiveness was conducted. As a result, the

evidence was summarised per decade. A meta-analysis could not be conducted because of the heterogeneity of the data.

## Results and Discussion

### Nurses' assertiveness in the 1970s and 1980s

In this period, six articles that investigated nurses' assertiveness met our criteria and were thus selected (Table 1) [12,17-21]. According to these researchers, nurses were less assertive, predominantly because they were female, experienced traditional training framed within a hierarchical structure, and perceived themselves as submissive helpers. Studies in this era investigated mainly the relationship between individual characteristics (e.g., age, level of education, job position) and assertiveness. In this decade, the educational background of nurses was regarded as a key factor in their assertiveness. Nurses were mainly educated at a nursing school (e.g., diploma programme), while doctors were educated at a higher level of academic success than did nurses. Nurses who accepted their professional role, had confidence based on their knowledge and nursing experience, showed more assertiveness [12,18]. However, it should be noted that small sample sizes and a lack of a robust experimental design limit the generalizability of these findings. In addition, four out of six studies were carried out in the U.S.. Assertiveness of nurses who have different cultural background can work differently in other countries.

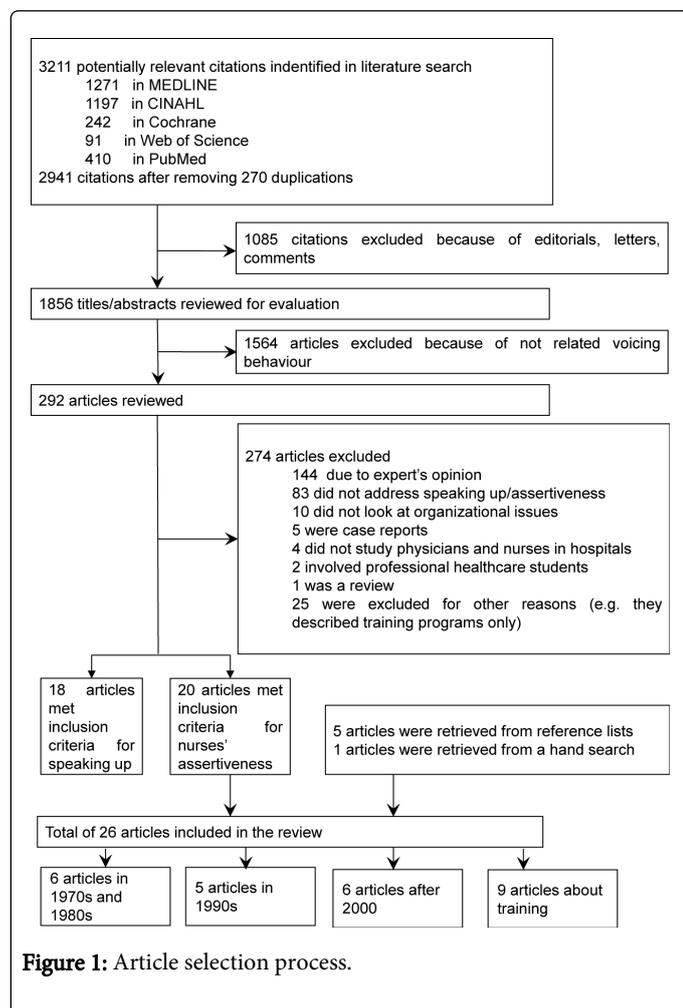


Figure 1: Article selection process.

Author (s), Year, Country	Aim of study	Sample size and description	Measurements and analysis	Main results	Study appraisal <sup>†</sup>
Gerry [12]	To explore nurses' assertiveness at work and in general life situations.	99 nurses from three hospitals.	Combination of scales from the Assertiveness Inventory, Rathus Assertiveness Schedule, College Self Expression Scale, Pearson correlations. Semi-structured interview: content analysis.	Nurses are found to be less assertive at work than in general life situations. Senior nurses are more assertive than staff nurses. Factors which promote assertive are knowledge, confidence, and experience. Inhibitive factors are traditional training and a hierarchical structure.	1. Yes 2. Yes 3. Yes 4. Yes 5. Weak
Farley [17]	To compare interpersonal communication	86 nurses from 47 hospitals.	Power Orientation Scale, Social Style Profile, t-test.	Nurse administrators held more positive orientations to three of the six power orientations, and were perceived to communicate more assertively than staff nurses.	1. Yes 2. Yes 3. Yes 4. Weak 5. Yes
Kinney [18]	To examine the relationship of conception and personality.	101 nurses in a university.	Nursing Role Conception Scale, Ego Development Sentence Completion Test, Personal Attributes Questionnaire, Adult	Assertiveness was significantly related to professional role conception.	1. Yes 2. Yes 3. Yes

			Self-Expression Scale, Spearman rank order correlation analysis.		4. Weak 5. Weak
Athayde [19]	To compare assertiveness levels in two different cities.	116 nurses in San Francisco and the Huston.	8 original operating situations, a nonparametric statistical test.	Nurses employed in San Francisco were more assertive than those in Houston. As a result of the small study sample, a number of demographic factors were not consistently related to assertiveness when subjects in the two cities were compared. In both geographical areas, a high level of assertiveness was associated with collegiate nursing education.	1. Yes 2. Weak 3. Yes 4. Yes 5. Yes/No
Gluck Charter [20]	To find nurses who need continuing education for interpersonal effectiveness.	A random sample of 125 nurses from 268 nurses at a VA hospital.	16 Personality Factor Questionnaire, ANOVA.	Nurses with 21 or more years' experience were found to be significantly less assertive than nurses with one to five years of experience.	1. Yes 2. Yes 3. Yes 4. Weak 5. Yes
Miller [21]	To evaluate nurses' assertiveness during nurse practitioner training.	64 nurses.	Rathus Assertive Scale, Spielberger State-Trait Anxiety Scale, Spence Helmreich Attitude Toward Women Scale, Bem Sex Role Inventory, t-test.	The nurse practitioner students became more assertive during and after the training.	1. Yes 2. Yes 3. Weak 4. Weak 5. Yes

Table 1: Characteristics of selected studies from the 1970s and 1980s

\*Study appraisal: 1) the aims and objectives of the research are clearly stated; 2) the researchers design is clearly specified and appropriate for the aims and objectives of the research; 3) the researchers provide a clear account of the process by which their findings were reproduced; 4) the researchers display enough data to support their interpretations and conclusions, and 5) the method of analysis is appropriate and adequately executed.

Author, Year, Country	Aim of study	Sample size and description	Measurements and analysis	Main results	Study appraisal*
Poroch & McIntosh [9]	To investigate the barriers of assertiveness.	200 nurses randomly sampled from a hospital.	Assertiveness Behaviour Inventory Tool, original Barriers to Assertive Skills in Nurses, Pearson's correlation, t-test, Chi-squared statistic, ANOVA.	Nurses considered themselves to have moderate to low assertiveness skills. Junior nurses are more assertive than senior nurses ( $t = 2.75$ , $p = 0.00$ ). A significant negative correlation was found between the level of assertiveness and the perception of barriers inhibiting assertive behaviour (e.g. fear punishment from colleagues and uncertainty about the differences between assertive and aggressive behaviour).	1. Yes 2. Yes 3. Yes 4. Weak 5. Yes
Johnson [22]	To examine the relationship between assertiveness and self-esteem.	164 nurses from members of the NSW Operating Theatre Association in Australia and the Australian Institute of Radiography.	Rathus Assertiveness Schedule, the Health Employees Assertiveness Scale, Rosenberg Self-Esteem Scale, the Self-Esteem Components Scale, and demographic characteristics, Pearson correlation.	There were positive correlations between each of the assertiveness scales and each of the self-esteem scales ( $p < 0.05$ ).	1. Yes 2. Yes 3. Yes 4. Yes 5. Weak
Kilkus [13]	To determine assertiveness levels.	500 nurses randomly from the list of active licensees registered with	Rathus Assertiveness Schedule, demographic characteristics, ANOVA.	Majority of nurses in this study are assertive. Nurses older 60 years old were less assertive. Nurses who have	1. Yes 2. Yes 3. Yes

		the Minnesota State Board of Nursing.		higher levels of education were more assertive.	4. Yes 5. Yes
Kruse [23]	To compare the assertiveness levels of staff nurses and nurse leaders.	200 staff nurses and 200 nurse leaders.	Rathus Assertiveness Schedule, demographic characteristics, t-test.	Staff nurses with a mean age of 40 years, employed full time, higher educational level, possessed more assertive behaviours than nurse leaders did (t = 2.51, p = 0.02).	1. Yes 2. Yes/No 3. Weak 4. Weak 5. Yes
Lavin [24]	To examine the relationship between assertiveness, self-esteem, and management style.	77 female registered nurses at medical surgical units in 10 acute hospitals.	Cooper Smith Self Esteem Inventory, Tennessee Self Concept Scale, Assertion Inventory, Thomas Kilmann Conflict Mode Instrument, correlation coefficient analysis.	Assertiveness was positively related with self-esteem and two conflict management styles (collaboration and competition).	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes

Table 2: Selected study characteristics in the 1990s

\*Study appraisal: 1) the aims and objectives of the research are clearly stated; 2) the researchers design is clearly specified and appropriate for the aims and objectives of the research; 3) the researchers provide a clear account of the process by which their findings were reproduced; 4) the researchers display enough data to support their interpretations and conclusions, and 5) the method of analysis is appropriate and adequately executed.

### Nurses' assertiveness in the 1990s

In the 1990s, larger studies were conducted (Table 2)[10,13,22-24]. A large study reported that nurses in the U.S. appeared more assertive than non-nurses (e.g. teacher) did [13]. This study demonstrated that at least one population of nurses (e.g. staff nurses) was assertive, even when the previous nursing literature assumed that nurses were typically unassertive. In addition, there was a positive correlation between academic degree level and assertiveness [23]. This indicates that the academic degree level of nurses may affect their assertiveness in this era. Other studies indicated a positive relationship between assertiveness and self-esteem [21,24]. Self-esteem reflects a person's overall emotional evaluation of his or her own worth. These findings support the role of confidence and self-esteem in enhancing the assertiveness of nurses.

### Nurses' assertiveness after 2000

Researchers tended to focus on the assertive behaviour of nurses at work (Table 3) [25-30]. Nurses in fields such as midwifery were found to be more assertive than some of their colleagues [30]. They suggested that nurses behave in a passive way, conforming to the stereotype of a 'nice' nurse, and were less likely to disagree with the opinions of others or to provide constructive criticism to others. Fear associated with communicating effectively in a work setting was not mediated by age or educational level. In addition, DeMarco et al. found that nurses in a non-staff role were more assertive than staff nurses [27], but they did not define a non-staff role. We therefore conclude that the status and experience of nurses can influence their assertiveness in health care settings.

Author, year,	Aim of study	Sample size and	Measurements and analysis	Main results	Study appraisal
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count ry		descriptio n			
Garon [25]	To explore nurses' perceptions of assertiveness	33 registered nurses in California.	Focus group interviews, thematic content analysis.	Taught at home, culture and language, doing the right thing, education, relationship with peers, managers and administrative/executives, organisational culture, transmission and reception, and outcomes after speaking up influenced assertiveness.	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Wong [26]	To test the relationship between leadership style and communication behaviour.	280 registered nurses working in acute care hospitals.	Authentic Leadership Questionnaire, Personal and Social Identification, Trust in Management Scale, Utrecht Work Engagement Scale, Helping and Voice Behaviours Scale, International Survey of Hospital Staffing, and Organizational of Patient Outcomes, structural equation analysis.	Authentic leadership significantly influenced staff nurses' trust in their manager and work engagement, which in turn predicted voice behaviour and perceived unit care quality ( $\chi^2 = 17.24$ , $df = 11$ , $p = 0.10$ , $IFI = 0.99$ , $CFI = 0.99$ , $RMSEA = 0.045$ ).	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes

DeMarco [27]	To develop a scale.	738 registered nurses in Massachusetts.	Silencing the Self Scale, Nurse Workplace Scale, and demographic items, factor analysis, and t-test.	Silencing behaviour is not significantly different by age ( $p = 0.28$ ) or education ( $p = 0.11$ ). Nurses in a non-staff role had lower scores than did staff nurses ( $p < 0.005$ ).	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Timmins & McCabe [28]	To describe the assertiveness of nurses and midwives.	1500 nurses and midwives registered with the National Nursing Board of Ireland.	Original questionnaire (44 items): Assertive behaviour to indicate the frequency with which they use them with three groups of nursing colleagues (nursing management, medical colleagues and other healthcare staff), demographic characteristics, open-ended questions of influencing factors of assertiveness, content analysis.	Assertive behaviour was used more frequently with nursing/midwifery colleagues than with management/medical colleagues. Responsibility to patient and knowledge emerged as supporting factors for using assertive behaviour. Managers, the work atmosphere, and fear were viewed as obstacles.	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Timmins & McCabe [30]	To describe assertive behaviour and the associated factors.	27 registered nurses from participants of nursing course, pilot study.	Questionnaire (44 items, same as in Timmins & McCabe 2005a)	Nurses behave in a passive way, conforming to the image of a 'nice' nurse. Colleagues were frequently reported as well as management, confidence and the atmosphere in the workplace as facilitator of assertive behaviour.	1. Yes 2. Yes 3. Yes 4. Weak 5. Yes

					Colleagues, management and atmosphere were also reported as militating factors.	
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**Table 3 :** Selected study characteristics after year 2000.

\*Study appraisal: 1) the aims and objectives of the research are clearly stated; 2) the researchers design is clearly specified and appropriate for the aims and objectives of the research; 3) the researchers provide a clear account of the process by which their findings were reproduced; 4) the researchers display enough data to support their interpretations and conclusions, and 5) the method of analysis is appropriate and adequately executed.

Several factors have been found as influencing factors of nurses' assertiveness. A sense of responsibility for patients and nursing knowledge were correlated with levels of assertiveness [30]. In addition, leadership qualities in managers, organisational culture, and relationships between colleagues play an important role in fostering assertiveness [26,30]. Managers' leadership positively influenced staff nurses' trust in their manager and their engagement in work, which in turn predicted assertiveness and quality of patient care [26]. In addition to these factors, nurses expressed concern towards how colleagues deal with their complaints and issues [25]. Staff nurses reported that they felt their message was ignored when they expressed themselves in an emotional way. As a result, they reported feeling disenfranchised and unimportant, which did not facilitate assertiveness [25]. They also reported that they wanted to know that their concerns were taken seriously [25]. In order to enhance the assertiveness of nurses, it is important for hospital managers and nurse managers to provide appropriate feedback to nurses regarding their communication. The home environment, education, and culture can all influence nurses' attitudes towards communication [25]. For example, assertiveness is less likely to be accepted in traditional Asian families, while American students are encouraged to be assertive [25]. Hospital managers and senior staff members should thus consider cultural backgrounds when assessing the standard of communication of staff members.

### Effectiveness of assertiveness training

To enhance assertiveness of nurses, the several training programmes have been conducted through the decades (Table 4) [31-39]. Most of the studies reported that nurses' self-reported assertiveness were improved after the intervention. However, no studies have evaluated the assertiveness of nurses in a clinical setting. Future studies should therefore investigate the efficacy of assertiveness training in a clinical setting.

Author, year, country	Sample size and description	Measurements and analysis	Main results	Study appraisal'
Raica [31]	Nurses (number unknown).	Pre-post study design, originally developed communication self-efficacy scale, t-test.	Outcome level: B. After training, the communication self-efficacy scores increased significantly in all dimensions.	1. Yes 2. Yes 3. Weak 4. Weak 5. Yes

Yamagishi et al. [32]	26 nurses from an urban hospital.	Pre-post study design, originally developed assertion knowledge, Assertive Mind Scale, Assertion Check List, Job Stress Brief Questionnaire, Depression from Brief Job Stress Questionnaire, Wilcoxon signed rank test.	Outcome level: B to C. Assertion knowledge and voluntary behaviour in assertive behaviour had increased at post-training and remained higher a month later, with regard to job stress, mental workload also decreased.	1. Yes 2. Yes 3. Yes 4. Weak 5. Yes
Shimizu et al. [33]	45 nurses in a hospital.	Pre-post study design, Japanese version of the Maslach Burnout Inventory, originally developed Communication skill check-list, t-test.	Outcome level: B. Personal accomplishment and two communication skills such as accepting valid criticism and negotiation of the intervention group significantly improved five months after the training ( $p < 0.05$ ).	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Freeman & Adams [34]	65 nurses in urban hospitals.	Comparison with reference group, original Behaviour Inventory Tool, Nurses' Assertiveness Inventory, t-test.	Outcome level: B. Nurses who had extra training with behavioural rehearsal of informal modelling reported increased assertiveness scores ( $p < 0.05$ ).	1. Yes 2. Yes 3. Weak 4. Yes 5. Yes
Dunn & Sommer [35]	62 nurses in a medical centre.	Pre-post study design, original Spinal Cord Injury Assertiveness Inventory, Rehabilitation Situations Inventory, ANOVA.	Outcome level: B. Nurses reported a significant decrease in discomfort of assertiveness.	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Lee & Crockett [36]	60 nurses in a hospital.	Comparison with reference group, Rathus Assertiveness Schedule, Perceived Stress Scale, ANOVA.	Outcome level: B. Nurses of training group at both post training and four weeks later scored significantly higher on the rating of assertiveness than those in the alternate treatment control group.	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Kirkpatrick & Forchuk [37]	24 nurses in a tertiary care psychiatric facility.	Pre-post study design, original semantic differential scale, Assertion Inventory, Power Apprehension Scale, unknown analysis method.	Outcome level: B. Assertive training does change nurses' perceptions of their assertiveness, as well as functioning within a nursing team and functioning within a multidisciplinary team.	1. Yes 2. Yes 3. Yes 4. Weak 5. Weak
McIntyre et al. [38]	26 nurses in a hospital.	Comparison with reference group, Assertiveness Self-statement Test, Rathus Assertiveness Schedule, Adult Self-expression Scale, t-test; Observation: two Likert scales for self-rating and role-play observation, ANOVA.	Outcome level: B. After training, intervention group members significantly increased their levels of assertiveness, as indicated on the self-report tests ( $p < 0.05$ ); role-play ratings supported the self-report results ( $p < 0.05$ ).	1. Yes 2. Yes 3. Yes 4. Yes 5. Yes
Dunham & Brower 1984, USA [39]	59 nurses from a practitioner program.	Pre-post study design, Assertion Inventory, original degree nurse attitudes towards assertiveness, t-test.	Outcome level: B. The training had a significant impact on attitude towards assertiveness.	1. Yes 2. Yes 3. Weak 4. Yes 5. Yes

**Table 4:** Selected study characteristics of assertiveness training.

\*Study appraisal: 1) the aims and objectives of the research are clearly stated; 2) the researchers use comparative study design; 3) the researchers provide a clear account of the process by which their findings were reproduced, including allocating the participants appropriately; 4) the researchers display Kirkpatrick outcome level (A learners' view on its intervention; B self-assessed modification of

learner; C transfer of learning, in other words an objectively measured change in learner or observer knowledge or skills; D results in terms of a change in quality of patient care) and enough data to support their interpretations and conclusions, and 5) the method of analysis is appropriate and adequately executed.

## The possible strategy for enhancing nurses' assertiveness

Recently the number of nurses who educated at higher academic level increased. The studies conducted after 2000 suggested that nurses behave in a passive way, conforming to the stereotype of a 'nice' nurse, and were less likely to disagree with the opinions of others or to provide constructive criticism to others. Nurses are expected to help bridge the gap between coverage and access, to coordinate increasingly complex care for a wide range of patients [10]. Nurse should understand these roles as a professional and should be educated nursing knowledge in order to provide patient appropriate care.

Several contextual factors were reported as influencing factors of nurses' assertiveness, including leadership qualities in managers, organisational culture, and relationships between colleagues [26,30]. Nurses concern towards how their colleagues react to their issues and complaints. It is very important to provide appropriate feedback safety in order to avoid fear for conflicts. Managers are expected to show leadership to provide a safe environment that enhances nurses' trust. Moreover, nurse' personal also influence nurses' assertiveness. For effective team working, we should respect the cultural backgrounds of other team members.

The present authors searched for English language articles, and most of the studies that were included in the review were carried out in the U.S. Therefore, our findings cannot be simply generalised in other nurses' communities with different cultural background. Nurses may have different roles in other countries. In addition, some studies, in particular studies conducted in 1970s and 1980s, have significant threats to validity including self-selection bias, response bias on self-reported measures. We should interrupt these results carefully.

## Conclusion

This article provides an overview of the studies on nurses' assertiveness. In the 1970s and 1980s, educational achievement was regarded as a key factor in nurses' assertiveness. However, the number of nurses who are trained in higher educational institutions has increased. Des pite this, nurses still experience some difficulties to be assertive themselves. Nurse should understand their role at the recent health care environment as a professional. Nurses' concerns about their colleagues' response to voice are also an important factor for deciding nurses' voicing. Nurse managers should take a leadership to avoid nurses' concerns about voicing their opinions with respecting nurses' cultural background.

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