Literature Review of Nursing Education Promoting Professional Socialization among Nursing Students

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Abstract

The aim of this review was to clarify the elements that promote socialization of nursing professionals from the findings of previous studies, with keywords related to socialization among undergraduate nursing students, and obtain indicators for promoting professional socialization in nursing students in the current nursing education. The literature review was conducted using a qualitative analysis of the promotion of professional socialization among nursing students. The results were reported according to the reporting checklist of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement. The authors conducted a literature search using electronic databases in July 2021, such as CINAHL (EBSCOhost), MEDLINE (EBSCOhost) for English articles, and Ichushi for Japanese articles. Included studies were from 1985 to 2021. Previous studies were integrated to current studies. A total of 23 articles in English and 34 articles in Japanese were analyzed. The methods for promoting professional socialization in nursing students include self-learning, online media, extracurricular elements, and clinical practice. Socialization process differed for each school year; the first-year students tend to have ideological answers, while the fourth-year students tend to have practical answers as a result of education. The process needs supports from instructors and mentors. Nursing education promoting professional socialization in nursing students has developed diverse modeling, positive effects for improving social skills, and impact of self-efficacy and self-esteem and has fostered professional commitment and professional identity. However, loss of idealism of professional identity after graduation should be considered with supports from instructors and mentors. To establish nursing professional identity smoothly, nursing instructors supporting skills should be developed by understanding students' stage of professional socialization.

Keywords

Professional Socialization, Nursing Students, Systematic Review, Basic Social Competency, Nursing Education

1. Introduction

Professional socialization is a process of forming and internalizing the sameness of professional roles and is defined as socialization in adults. It is said that the professional socialization in nursing professionals is cultivated in basic nursing education and has been studied in the fields of sociology, medicine, and nursing. In Japan, nursing education is only a course for nursing generalists. After graduation, new nurses are trained in specific nursing areas at each hospital they belong to. In 1992, the Act on Promotion of Securing Human Resources for Nurses was enacted to train nurses, improve treatment and its quality, and promote employment, which triggered an increase in the number of nursing universities. The goal of increasing nursing universities is to secure nurses with advanced expertise and skills in hospitals and other places, such as homes where nursing is provided. The number of nursing universities continues to increase in Japan, from 11 in 1990 to 274 in 2020 [1].

However, enhancing the quality of nursing education in nursing universities is a challenge, and cooperation between clinical training facilities and universities and improvement of teachers' educational skills are required. In particular, in the current situation where face-to-face classes and clinical training are becoming difficult because of COVID-19, the problem is how to develop professional socialization in nursing students.

Background

Hatano (1993) investigated changes in the professional identity of nursing students and revealed that there are three distinctive stages in the development of identity of the nursing profession: 1) yearning for a romantic occupation before knowing the reality of the nursing profession; 2) disappointment to the occupation after knowing the reality of the nursing profession; 3) and establishing the identity of the nursing profession and stabilize it [2].

Takahashi (1996) investigated factors related to professional socialization, assuming that external factors included career paths after graduation and teachers' activities, and internal factors included background of teachers and entrance examination levels of students [3]. Iwata (1997) reported the relationship between factors related to professional socialization and student life satisfaction [4]. Kawaguchi (2003) showed Professional Learning Climate (PLC) as the atmosphere and attitude of nurses, which involved 10 elements: "showing concern", "showing a listening attitude", "respecting", "believing", "being humble", "creating a relaxing space", "showing personal feelings" and "showing enthu-

siasm", "humor" and "wit" [5]. Yasukata (2003) states that the acquisition of PLC requires not only an increase in knowledge or repetition of practice but also an accumulation of practice through reflective thinking [6]. Osawa (2005) analyzed students' perceptions of professional socialization using PLC elements and clarified that perceptions can be classified into two categories: human qualities and professional abilities [7].

Howkins (1999) mentioned that the professional socialization process is complex and diverse, and the impact of nurse education on professional socialization depends on students' past experiences, the reflective nature of the process, and the beliefs and values promoted in the course [8]. Holley (2009) identified the elements of socialization as involvement, knowledge acquisition, and investment. Investment is involved not only in finances but also in time and intellectual energy in the professional program of the study [9].

In 2006, the Ministry of Economy, Trade, and Industry of Japan defined the basic skills necessary for working with diverse people in the workplace and community as the "basic social competency". The concept is used by companies, students, and school officials as a common language and is developing a program for its development and evaluation. Basic social competency is composed of three categories: action, thinking, and teamwork and 12 elements: subjectivity, approach skill, execution ability, problem-solving ability, planning ability, creativity, communication ability, listening ability, flexibility, situation grasp ability, discipline, and stress control ability. In 2018, basic social competency was defined as an active role at each stage of the life cycle, and it needs reflection to develop one's own career [10]. These abilities are required in basic nursing education. Sugiura (2012) proposed the basic social competency for nursing students by adding "ethics" to the elements [11]. Kitajima (2012) revealed a positive correlation between basic social competency and nursing practice skills [12]. Nozaki (1999) states that nursing students have high social skills and are good at advanced skills, such as planning [13]. Shiino (2013) states that nursing students with high social skills are more likely to build relationships with people and have more opportunities to be approved in school life [14]. Therefore, the evaluation of nursing students' social skills and analysis of their content have been carried out as important factors in nursing education.

Studies on professional socialization of nursing students have been conducted since the 1980s; the keywords are specified as "professional socialization", "basic social competency" and "social skills". The aim of this review was to clarify the elements needed for the socialization of nursing professionals from the findings of previous studies, with keywords related to socialization among undergraduate nursing students, and obtain indicators for promoting professional socialization in nursing students in the current nursing education.

2. Design

It is a systematic review.

3. Method

The literature review was conducted using a qualitative analysis of the promotion of professional socialization among nursing students. Results were reported according to the reporting checklist of the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement [15].

3.1. Search Strategy

The authors conducted a literature search using electronic databases in July 2021, such as CINAHL and MEDLINE (EBSCOhost), accidental extraction for English articles, and Ichushi for Japanese articles. The search terms used were "socialization", "baccalaureate students", "professional socialization" and "nursing" in English, "basic social competency", "social skills" and "professional socialization" in Japanese. There were 70 articles in English and 96 articles in Japanese. The search process refers to the PRISMA 2020 flow diagram (Figure 1). A total of 57 included studies were published between 1985 and 2021; 23 English articles were published between 1985 and 2021, and 34 Japanese articles were published between 1996 and 2021 included eligible articles for the aim of the study and articles involving indicators for the professional socialization of undergraduate nursing students. Studies should clarify the elements that promote professional socialization among undergraduate nursing students. Study designs should be cross-sectional, mixed methods, and qualitative; and systematic reviews should be conducted with clearly defined methods of data collection. The final set of citations used Microsoft Excel and Word for eligibility screening of titles and abstracts. Participants of studies were involved undergraduate nursing students, new nurses and their instructors, professional nurses were excluded. The excluded publication types were, comments, editorials, handouts, newspaper articles, biographies, and autobiographies. All languages were included in the search results, and non-English and non-Japanese results were removed in the review process (**Table 1**).

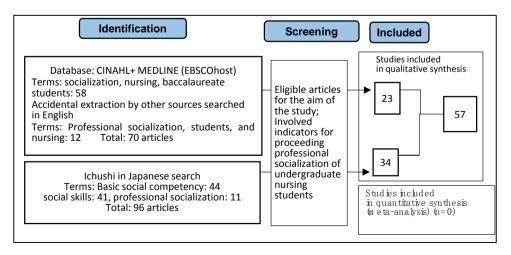


Figure 1. Flow diagram of articles selection.

Table 1. List of analyzed articles.

Author (Year) [No.]	Research method	Participants/Samples
English articles (n = 23)		
McCain, N. L. (1985) [16]	Cross-validation design	422 students
Geraldine, E. E. (1987) [17]	Information analyses	42 studies
Dobbs, K. K. (1988) [18]	Corwin's Nursing Role Conception Scale	103 baccalaureate nursing students
Gray, M. (1999) [19]	Grounded theory, longitudinal study	17 nursing students
Kessel, C. A. (2006) [20]	Mixed methods study	105 nursing faculty
Shinyashiki, G. T. (2006) [21]	Questionnaire research	278 nursing students
Holley, K. A. (2009) [9]	Qualitative case study	19 students and 4 faculty members
Condon, E. (2010) [22]	Qualitative study utilizing interview data	8 Japanese nursing students and 2 faculty members
Zamanzadeh, V. (2014) [23]	Cross-sectional study	130 first-year nursing students and 100 fourth-year nursing students
Joselin, M. (2016) [24]	Review	6 models
Michael, T. (2016) [25]	Discourse analysis	49 nursing students
De Swardt, H. C. (2017) [26]	Sequential mixed-methods design	12 experts
Pinmohammadi, M. R. (2017) [27]	Exploratory qualitative approach y	14 nursing students
Moradi, Y. (2017) [28]	Systematic review	24 articles
Yazdannik, A. (2017) [29]	Mixed method	71 nursing students, 20 nursing educators, and 5 nursing board staffs
Gibbon, B. (2018) [30]	Focus group interviews	18 final year nursing students
Safari, Y. (2018) [31]	Descriptive-analytical study	80 nursing students
Lee, J. J. (2019) [32]	Grounded theory approach	16 nursing students, 4 nurses and 2 university lecture
Salisu, W. J. (2019) [33]	Systematic review	8 studies
Alharbi, M. (2020) [34]	Descriptive qualitative study	16 undergraduate nursing students
Kim, S. (2020) [35]	Cross-sectional design	412 nursing students
Pai, HC. (2021) [36]	Quantitative study	108 nursing students
Taylan, S. (2021) [37]	Phenomenological approach	10 nursing students
Japanese articles (n = 34)		
Takahashi, T. (1996) [3]	Quantitative research	393 freshmen students, 300 senior students, and 88 faculty members
Osawa, S. (2005) [7]	Questionnaire research	39 nursing students
Miyawaki, M. (2007) [38]	Individual and group interviews	4 nursing students
Miyawaki, M. (2008) [39]	Semi-structured interviews	4 nursing students
Omoto, M. (2009) [40]	A qualitative study utilizing interview data	4 nursing university students
Nishina, Y. (2010) [41]	Questionnaire research	90 nursing students
Tsukamoto, N. (2010) [42]	Questionnaire research	88 nursing students
Kitajima, Y. (2011) [43]	Questionnaire research	1043 nursing students
Ishimitsu, F. (2012) [44]	Questionnaire research	83 nursing students

Continued

Takeda, K. (2012) [45]	Questionnaire research	204 nursing students
Decker, K. (2013)[46]	Questionnaire research	112 nursing students
Kitajima, Y. (2013) [47]	Questionnaire research	131 nursing students
Nishina, Y. (2013) [48]	Questionnaire research	56 nursing students
Shiino, M. (2013) [14]	Questionnaire research	80 nursing students
Takeda, K. (2013) [49]	Questionnaire research	115 nursing students
Yamamoto, K. (2013) [50]	Questionnaire research	259 nursing students
Ishikawa, M. (2014) [51]	Questionnaire research	859 nursing students
Michihiro, M. (2014) [52]	Questionnaire research	260 nursing students
Shinohara, S. (2014) [53]	Questionnaire research	187 nursing students
Ohue, T. (2015) [54]	Questionnaire research	56 nursing students
Nakanishi, J. (2016) [55]	Descriptive analysis	67 nursing students
Wakasugi, S. (2016) [56]	Questionnaire research	623 nursing students
Kitajima, Y. (2017) [57]	Questionnaire research	473 new nurses
Kojima, N. (2017) [58]	Questionnaire of Basic social competency	134 nursing students
Ootori, K. (2017) [59]	Questionnaire research	112 nursing students
Goto, M. (2018) [60]	Questionnaire research	444 nursing college students
Kiriake, M. (2018) [61]	Questionnaire of Basic social competency	69 nursing students
Okuda, R. (2019) [62]	Questionnaire of Basic social competency	162 nursing students
Saito, I. (2019) [63]	Questionnaire research	104 nursing students
Yamamoto, Y. (2019) [64]	Questionnaire of Basic social competency	55 nursing students
Ito, K. (2020) [65]	Questionnaire of Basic social competency	441 nursing students
Komatsu, M. (2020) [66]	Semi-structured interviews	5 nursing students
Tanaka, S. (2020) [67]	Questionnaire research	177 nursing students
Ueda, M. (2021) [68]	Questionnaire research	12 nursing students

3.2. Data Analysis

A qualitative synthesis was conducted for the data analysis. The characteristic of elements that promote the socialization of nursing education from the findings of previous studies were extracted and categorized. The relationship and positioning of each category were examined, and the modeling of professional socialization in nursing education was aimed. The results of the modeling were discussed from the perspective of indicators for promoting professional socialization of nursing students in the current nursing education.

4. Result

4.1. Characteristics of Included Studies

A total of 68 contents were extracted from the outline of the research findings in the included studies in line with the aims of this review, and they were grouped into 10 categories. First, five categories grouped from 40 contents were integrated into an effective learning method for promoting professional socialization, as illustrated in **Table 2**. Second, the other five categories grouped from 28 contents were integrated into the characteristics of nursing education promoting professional socialization, as illustrated in **Table 3**.

Table 2. Categories of contents on effective learning method for promoting professional socialization.

Category (n: number of contents) Contents: outline of research findings (40)	[No.]
Proceeding socialization by instructors and mentors (11)	
Pre-graduation consisting preceptorship increases problem coping strategies and facilitates role transfer to nurses.	[18]
Proceeding socialization by nursing instructor or master instructor.	[3]
Mentors are the cornerstone of students.	[19]
A professional nursing faculty shows a professional role model by interacting with students in the classroom.	[20]
Influences from faculty, peers, and professional colleagues. In the online program, student–faculty interactions were almost always linked to a particular task or question.	[9]
Recommendation from parents until junior high school and recommendation from teachers until high school have impact on nursing professional socialization.	[53]
Need for substance discourse than theoretical evidence with instructors.	[29]
Supportive teachers, clinical teachers, and mentors progress in professional socialization of nursing students.	[33]
Success of the curriculum management needs support from nursing educators.	[32]
Whether students have a negative experience, teachers and instructors need to encourage feedback on the spot and intentionally engage to have a positive experience.	[64]
Instructors with professional nursing experiences facilitate professional socialization.	[37]
Impact of clinical practice on professional socialization (9)	
"Professional socialization" learned through experience in clinical training.	[39]
Experience the attractiveness of nursing in clinical practice.	[40]
Impact of communication and clinical experiences.	[22]
Experiences of clinical practice improve social skills.	[44]
Correlation between social skills and nursing practice.	[45]
A pragmatic acceptance of "missed care" relates to professional socialization.	[30]
Positive and negative experiences are presented during clinical nursing practice.	[64]
The impact of clinical practice experiences are shown in socialization.	[62]
Improvement of clinical learning environment for adaptation and adjustment are needed for clinical setting.	[35]
Extracurricular elements (9)	
The impact of communication and extracurricular elements on professional socialization.	[22]
Social skill points of students with part-time jobs or with many consultants are high.	[45]

Continued

Assertion training maintains social skills.	[48]
Activities outside class hours on socialization improve basic social competency.	
Participatory experiential learning involving the elderly.	
Impact of part-time job experience on socialization.	
Self-learning outside class hours influences basic social competency.	
Extracurricular networking, greater education, interactive learning, and academic support.	
Japan-US Joint Disaster Nursing Workshop.	[66]
Self-learning effectiveness (7)	
Improve environment for reflective thinking.	[7]
Class module, preparation for national nursing examination, and thinking time.	[40]
Self-adjusting learning strategies in particular, a monitoring strategy (a strategy for making learning plans, objectively monitoring one's own learning situation, judging the result through self-evaluation, and proceeding with learning: a metacognitive strategy).	[47]
Active learning improves social skills.	[52]
Information summarization decreases mental stress.	[59]
Role play and discussion improve basic social competency.	[65]
Self-learning effectiveness promotes self-reflection and caring behavior.	[36]
Effect of using electrical media (4)	
Online teaching method through cooperative learning, discussions, case studies, and professional role modeling.	[20]
Using mobile phone is associated with social skills.	[46]
Social media helps nursing students develop socialization and professional identity.	
Diverse experiences of social competency in remote work; practice in school.	

Table 3. Categories of characteristic findings of nursing education for promoting professional socialization.

Category (n: number of contents) Contents: outline of research findings (28)	
Differences in socialization process for each school year (10)	
First-year students are better than fourth-year students in the Japanese version of the Modified Stone's Health Care Professional Attitude Inventory. It was suggested that the first graders provided ideological answers, and the fourth graders provided practical answers as a result of education.	[3]
A majority of changes in a difference in values, norms, and professional behavior occur between the second and third course years in a college of nursing.	[21]
$Image \ for \ nurses' \ changes \ from \ angel \ to \ professional \ according \ to \ the \ second-year \ students.$	[38]
Basic social competency score of the fourth-year students is better than that of the first-year students.	[43]
Basic social competency score improves with each grade.	[55]
Professional metamorphosis from a passive role in the early stages of learning to an active involvement in coping with one's own personal and professional problems in the last year of the educational program.	[27]

Continued

There is no significant difference in basic social competency between the fourth-year and first-year students.	[58]
Basic social competency in late term is better than in early term among first-year students.	[61]
Basic social competency score of fourth-year students is the best among all students.	[62]
The impact of clinical competencies to professional socialization is significant only in fourth-year students.	[35]
Positive effect of improved social skills (5)	
Improved social skills foster self-expression, honesty, delegation/assistance skills, and acceptance skills.	[42]
Improved social skills enhance self-esteem, satisfaction of school life, and friendships.	[41]
Nursing students with high social skills have feelings of adjustment and high motivation.	[14]
Improved social skills enhance healthy feelings.	
Improved social skills decrease anxiety.	[60]
Professional commitment and idealism for professional identity (5)	
Loss of idealism of professional identity after graduation.	[25]
Professional socialization is the dynamic, interactive process of development for professional identity.	[28]
Nursing students can attain the necessary professional commitment in this career through professional socialization.	[31]
Personal factors of facilitators are nursing students' internal motivation, forming professional identity, and fostering resilience to maintain professional ideals.	[33]
"Establishment of one's own view of medical profession" on professional identity is an important factor for basic social competency.	[67]
Modeling for professional socialization (5)	
Results of the study failed to support the Cohen model.	[16]
The explanatory model of professional socialization in nursing and the five domains defined as self-growth for socialization are shown. The students' domains are self-image, role conception, attitudes, values, personality, and students' demographics. In the educational setting, the type of program, teaching method, and faculty characteristics are important factors.	[17]
The effect of the cognition of caring on socialization process.	[23]
Review of diverse theoretical model to explain professional socialization of nursing students.	[24]
Professional Socialization Guidelines for supporting students have been integrated and proposed for nurses and educators. Teaching and facilitation strategies, positive clinical learning environment, clinical support, and role models from professional nurses and educators were shown in the guidelines.	[26]
Impact of self-efficacy and self-esteem on socialization (3)	
$Decreased \ self-esteem, \ difficulty \ in \ acquiring \ professional \ skills \ because \ of \ disregard \ for \ others.$	[49]
Critical thinking attitude, characteristics of self-efficacy, and self-fulfilling motivation were associated with socialization.	[63]
"Understanding of patients/efficacy of care" on clinical practice's self-efficacy is important factors for basic social competency.	[67]

4.2. Categories of Contents on Effective Learning Method for Promoting Professional Socialization (Table 2)

Five categories consisted of 40 contents of the outline of research findings about effective learning methods for promoting professional socialization. "Proceeding socialization by instructors and mentors" consists of 11 contents commonly involved in studies between 1988 and 2021. In particular, it was shown that supportive teachers, instructors, and mentors were important, even if students had a negative experience; they needed to intentionally engage to have a positive experience [64].

The "impact of clinical practice on professional socialization" consisted of nine contents from the involved studies between 2008 and 2020. Not only the successful clinical practice is useful but also the diverse experiences; "a pragmatic acceptance of missed care" and "positive and negative experiences during clinical nursing practice" were found useful for professional socialization [30] [64].

"Extracurricular elements" consists of nine contents from the involved research between 2010 and 2020. "Activities outside class hours", "self-learning outside class hours" and "part-time working" were found useful for promoting professional socialization [45] [51] [56] [57].

"Self-learning effectiveness" consisted of seven contents from the involved studies between 2005 and 2021. "Self-adjusting learning strategies" active learning" and "self-learning effectiveness to promote their self-reflection" were found useful for promoting professional socialization [36] [47] [52].

"The effect of using electrical media" consisted of four contents from the involved studies between 2006 and 2021. "Online teaching method by cooperative learning, discussions, case studies, professional role modeling" and "diverse experiences of social competency in remote work" were methods without direct face to face interaction, but these were found useful for promoting professional socialization [20] [68]. Alharbi (2020) states that social media makes it easy for nursing students to develop socialization and professional identity" [34].

4.3. Categories of the Characteristics of Nursing Education for Promoting Professional Socialization (Table 3)

The five categories consisted of 28 contents on the characteristics of nursing education that promotes professional socialization. "The differences in socialization process for each school year" consisted of 10 contents from the involved studies between 1996 and 2020. "A majority of changes are caused between the second and third course year" and "image of nursing students changes from angel to professional according to second-year students" were reported [21] [38]. "Fourth-year students are the best of all students" and "fourth-year students are better than first-year students" were suggested [41] [62]. Takahashi (1996) suggests that the first-year students provided ideological answers, and the fourth-year students provided practical answers as a result of education [3].

"The positive effect for improving social skills" consisted of five contents from the involved studies between 2010 and 2018. "Nursing students with high social skills have feelings of adjustment and high motivation" and "improvement of social skills decreases anxiety" were reported [14] [60].

"Professional commitment and idealism for professional identity" consisted of five contents from the involved studies between 2016 and 2019. Salisu (2019) states that "personal factors of facilitators are internal motivation of nursing students, forming professional identity and fostering resilience to maintain professional ideals" [33], but Michael (2016) reports a "loss of idealism of professional identity after graduation" [25].

"Modeling for professional socialization" consisted of five contents from the involved studies between 1985 and 2017. McCain (1985) reveals that "results of the study failed to support the Cohen model," but diverse theoretical models to explain professional socialization of nursing students are reviewed, and the models and guidelines for professional socialization in nursing students are shown [16] [17] [23] [24] [26].

The "impact of self-efficacy and self-esteem on socialization" consisted of three contents from the involved studies between 2013 and 2020. "Characteristic of self-efficacy and self-fulfilling motivation were related with socialization" and "clinical practice's self-efficacy is important factors" were reported [49] [63] [67].

5. Discussion

5.1. Model for Promoting Professional Socialization of Nursing Students

The categories integrated in the contents extracted from the involved studies discussed the relationship between each category; the model for promoting professional socialization of nursing students was formed, as shown in Figure 2.

The methods for promoting professional socialization of nursing students include self-learning, online media, extracurricular elements, and clinical practice. The socialization process is different for each school year; the first-year students tend to have ideological answers, while the fourth-year students tend to have practical answers as a result of education, and the process needs support from instructors and mentors.

Nursing education promoting professional socialization of nursing students has developed diverse modeling, positive effects of improved social skills, and impact of self-efficacy and self-esteem and has fostered professional commitment and professional identity. However, loss of idealism of professional identity after graduation must be considered, with support from instructors and mentors.

Geraldine (1987) stated the interacting domains of potential professional self-growth, which is defined as the outcomes of the socialization process, and showed an explanatory model of professional socialization in nursing. In the

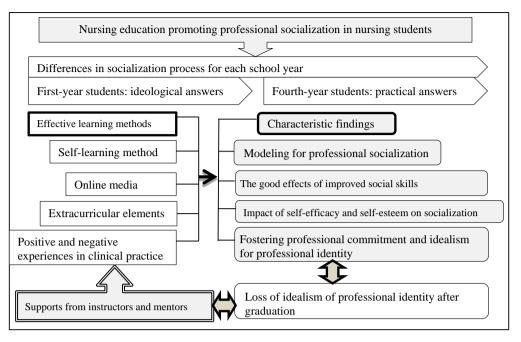


Figure 2. The model of nursing education to promote professional socialization in nursing students.

educational setting, faculty and students are the major intervening variables that influence these outcomes; the types of program, teaching methods, and characteristics of teachers are suggested as important factors. In addition, more recent studies suggest that changes in nursing education have a positive effect on socialization outcomes [17]. De Swardt (2017) showed that teaching and facilitation strategies, clinical support, and role models from professional nurses and educators are important in their guidelines. A positive clinical environment has been shown to be an important factor [26]. Even if students have a negative experience, teachers and instructors are encouraged to make feedback on the spot, and they should be involved in making a positive experience, not ending it as a negative experience [64]. The factor of supports from instructors and mentors affects the socialization of nursing professionals significantly. These models for fostering professional socialization among nursing students should be updated continuously to provide relevant findings for nurse educators' planning and implementing programs as society may demand.

5.2. Indicators for Promoting Professional Socialization of Nursing Students in the Current Nursing Education

It was clarified that the useful methods for promoting professional socialization of nursing students include self-learning, online media, extracurricular elements, and clinical practice. Although the current major challenge of nursing education is the problem of a class module with impossible face-to-face interaction because of COVID-19, the possibilities of fostering professional socialization through self-learning method or online media can have positive findings; thus, these methods should be introduced to the nursing education in the future. Nurse

educators and the next generation of nursing students should prepare to face global health challenges. Nursing education is changing its approach both clinically and academically because of the pandemic, and nurse educators should have a great role in turning the uncertainty into a good opportunity by adapting to the "new normal" utilizing their expertise [69].

The previous results showed that the first-year students tend to have ideological answers, while the fourth-year students tend to have practical answers as a result of education involving clinical practice and traditional teaching methods. The next generation of nursing students should monitor their socialization process to determine how they will differ in each school year.

In addition, these findings showed the risk of loss of idealism in professional identity after graduation. Hatano (1993) suggested that there are three distinctive stages of the development of nursing professional identity: 1) yearning for a romantic occupation that does not know the reality of the nursing profession; 2) disappointment to the occupation after knowing the reality of the nursing profession; and 3) establishing the identity of the nursing profession and stabilize it [2]. To transition smoothly from the first stage to the last stage, nursing professional identity should be established, and nursing instructors' supporting skills should be developed by understanding the students' stage of professional socialization. How to improve the socialization of nursing professionals should be carefully discussed by thinking about the many factors of students, nursing instructors, and educational environments.

6. Conclusions

Professional socialization is a process of forming and internalizing the sameness of professional roles and is defined as socialization in adults. Professional socialization of nursing professionals is cultivated in basic nursing education and has been studied in the fields of sociology, medicine, and nursing.

The aim of this review was to clarify the elements needed for the socialization of nursing professionals from the findings of previous studies, with keywords related to socialization among undergraduate nursing students, and obtain indicators for promoting professional socialization of nursing students in the current nursing education. The literature review was conducted using a qualitative analysis of the promotion of professional socialization among nursing students. Results were reported according to the reporting checklist of the PRISMA statement [15].

The methods for promoting professional socialization of nursing students include self-learning, online media, extracurricular elements, and clinical practice. The socialization process is different for each school year; the first-year students tend to have ideological answers, while the fourth-year students tend to have practical answers as a result of education, and the process needs support from instructors and mentors.

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has developed diverse modeling, positive effects of improved social skills, impact of self-efficacy and self-esteem and has fostered professional commitment and professional identity. However, loss of idealism of professional identity after graduation must be considered with support from instructors and mentors. To transform smoothly from the first stage to the last stage, nursing professional identity should be established, and nursing instructors supporting skills should be developed by understanding the students' stage of professional socialization.

Limitation

This study was conducted to integrate the outline of old and new articles for promoting professional socialization among nursing students. In the future, it will be necessary to analyze and integrate new research findings for less than five years to reflect the latest social states. Additionally, the number of Japanese articles was higher than that of English articles, which limits the generalizability of the research findings.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this study.

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