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Original Article

Using action research to evaluate a nursing orientation program in a multicultural acute healthcare setting

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ABSTRACT

Objectives: Competence motivates newly employed nurses to provide high-quality care, which leads to appropriate patient care and satisfaction. A nursing orientation program can have a positive impact on new nurses who are joining healthcare organizations. The research examined the orientation program for new nurses in a multicultural setting to redesign the program.

Methods: The study was carried out in a multicultural tertiary setting. Action research was used as a research strategy with qualitative content analysis and quantitative evaluation. Seventy nurses were part of the orientation program. The competence of the nurses was assessed using the Nurse Competence Scale. Focus-group discussions were also conducted to find the views of the beneficiaries about the program.

Results: The study revealed that the overall competence was high, and there was an overall gain in the competence score (5.48%) among the nurses. Among their competence in different dimensions, new nurses had a maximum gain in competence for the dimension of ensuring quality. However, they showed low competence gain in teaching coaching. The results show that the difference in the overall pre- and post-test scores was statistically significant ($P < 0.05$) in all dimensions except teaching coaching and managing situations, and the program was effective. However, a few challenges were identified in the program.

Conclusions: New nurses were found to be competent, and the orientation program had a significant impact on the competence of the nurses. The findings emphasized the need for modification of some content and strategy for future programs. The strategies developed from the findings were presented. This helps hospitals to consider examining specific aspects of the orientation program and redesigning it so it can enrich the experiences of new nurses.

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What is known?

- Hospitals provide an orientation program for new nurses.
- The orientation program provides benefits for new nurses.
- It fails to address the crucial aspects of the organization

What is new?

- Competence of new nurses was evaluated, the findings indicated that the nursing orientation program contribute to the competence of newly recruited nurses
- New nurses had very good competence gain in ensuring quality roles. However, they showed low competence gain in teaching coaching and managing situation roles.
- The new nurses had varied views about the orientation program, and this helped to identify strategies to be incorporated in future program

1. Introduction

Currently, the healthcare sector is facing a tremendous shortage of nursing staff. This has influenced healthcare organizations'

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decision to look for new ways of attracting healthcare professionals. A highly effective and well-defined orientation program can inspire a positive attitude and help new nursing staff demonstrate competence in nursing care. Therefore, hospitals need to have their orientation programs, review the programs regularly, make changes, and redesign them to achieve user satisfaction.

Nurse competence leads to improved quality of patient care and satisfaction of both patients and nurses [1]. However, nurses were found to be moderately competent [2]. Orientation programs provide an opportunity to develop overall knowledge, competency, experience, relationships, clinical judgment, and application skills of nurses in a clinical setting [3]. Competency-based nurse orientation programs focus on both new and experienced nurse employees. They decrease anxiety related to the new nursing role and improve collegiality among all levels of nurses, which leads to increased nurse satisfaction and high quality of health care delivery [4].

An orientation process is an introduction of new employees to new technologies, procedures, and policies at the workplace, and it should be considered in all levels of an organization [5]. Hospitals spend a significant budget on the recruitment and orientation of nurses. Therefore, it is important to explore ways of enhancing their orientation programs to ensure that they retain nurses successfully and save on costs [5]. The orientation programs adopted by hospitals should address the essential factors that contribute to the self-competence of nurses.

Worldwide, the factors contributing to nursing competence have been the subject of extensive research. For instance, the ethical climate of the workplace affects the professional practice and competence of nurses [6,7]. A professional portfolio helps nurses update their knowledge, skills, and competence in their roles as health care providers [8]. Also, caring about nurses' well-being as well as fostering positive forms of organizational commitment increases nurses' self-competence [9]. Healthcare organizations complement orientation programs with transition programs to support newly qualified nurses and enable them to become confident and competent [10]. Unsuccessful transitions lead to new graduates leaving the workplace and the nursing profession altogether [11], and the effectiveness of Nurse Residency Programs in easing their transition into practice and retaining them has received various criticism [12]. Therefore, transition programs should consider new graduate experiences and their unmet needs to better support them and promote their confidence and competence to practice within their scope [13].

Developing systematic orientation programs requires a dedicated unit and team that can overcome any challenges and move forward [14]. Staff educators are the ideal persons in a healthcare setting to develop effective orientation programs for nurses in both general and specialized clinical areas. Additionally, nurse managers and organizations also have roles to play in developing orientation programs [15]. Nurses with learning needs, knowledge deficits, and lack of skills were identified during the orientation program. It facilitated the identification of gaps in devising orientation programs [16,17].

Competence assessment and targeted intervention are recommended as tools for the management of planning programs to ensure a competent and motivated workforce and high-quality health care [18]. The existing literature suggests that systemic evaluation of nurses' competence and related factors is essential in enhancing nursing care quality [19].

Consequently, all the emphasized aspects need to be considered when implementing orientation programs. There is a lack of knowledge about how effective the orientation program is and how nurses perceive it. The present study builds on previous studies by examining nurse competence during orientation programs and

analyzing the strengths, weaknesses, and strategies for the enhancement of the programs.

A structured nursing orientation program had been implemented in the setting for the past seven years. The effectiveness of nursing orientation programs has never been scientifically evaluated, and no study found covered the level of competence addressed in this program. The importance of the study is born out of the fact that the orientation program plays a vital role in the enhancement of the competence of new nurses in the hospital setting. Furthermore, no studies investigated the effect of an orientation program from the recipients' perspectives. There is an insufficient research effort, particularly in the country, to draw significant conclusions on the design of a well-designed nursing orientation program.

Thus, an investigation to examine what the current orientation program provides for improving the competence of new nurses. In addition, there is a need to evaluate from the perspective of the nurses. Taking all the above into account, this research attempted to establish the effect of general nursing orientation and preparation for practice programs, identify the strengths and weaknesses, and recommend if there is a need for redesigning and enhancing the program. In view of the research incentives, the study aimed to identify the impact of the orientation program through self-assessment of competence and focus groups.

2. Research methodology

2.1. Research design

Action research was employed as a research strategy coupled with qualitative content analysis and quantitative content evaluation. Action research mainly focuses on changes in organizational education and practice, and it includes both qualitative and quantitative approaches [20,21].

In this study, action research was employed and adopted the dual strategy of qualitative and quantitative assessment. The nursing orientation program offered by the nursing education department at the setting took place over three weeks with educational sessions and clinical skills workshops five days a week for 40 h. In the first session, the researcher introduced the features of the orientation program and the research objectives. At the beginning of the orientation, a pretest on the competence level of all nurses was done. The orientation program was conducted as planned. There was a nonparticipant observation in the sessions of the orientation program by the research team. The self-assessment of competence was done at the end of the orientation. This was followed by a series of focus group discussions with nurses who completed the orientation program. The main findings of the study were drawn from the competence assessment survey and focus group discussions.

Nurses who participated in the self-assessment of competence were approached by the researcher upon completing the orientation program and were asked to partake in a focus group. At this stage, half of the participants declined due to lack of time, lack of interest in the subject, or an unwillingness to take part in the research. The focus groups enabled participants to construct and argue their views on the orientation program. The 35 participants were divided into three focus groups. The focus groups were conducted by two of the co-researchers, and the aim was explained to all the participants. The focus groups typically began by asking people about their general views about the program and then about the specific aspects of the program. The focus groups were tape-recorded and transcribed for analysis. The findings were extracted by making associations between quotations touching on similar themes, which were grouped and checked for verification. The

transcripts were repeatedly read and discussed among the research team concerning the key themes identified. This research was collaborative and practical in that it worked with nurses participating in the orientation program, and the research involved stakeholders of the program. Participants shared their views and helped to develop a common set of recommendations for improvement.

2.2. Setting

The setting for the study was a multicultural tertiary hospital—one of the most prominent health care settings in the Middle East—with 1,095 beds in the heart of the Kingdom of Saudi Arabia. The hospital hosts a structured orientation program for all the new nurses joining the setting.

2.3. Sample and sampling method

The study included all the newly employed nurses (about 100) undertaking the nursing orientation and preparation for the practice program. A purposive sampling technique was employed in selecting the subjects for the study, and all the 100 newly employed nurses were chosen for the study due to the limited number of nurses. However, the response rate was only 70%, and the sample size was 70. All the new nurses who were undertaking the orientation program and willing to participate were included in this study. Being registered nurses, both Saudi and non-Saudi nurses, was the inclusion criteria. Being nurses selected for managerial positions and not being willing to participate were the exclusion criteria. The study was carried out from April 2018 to August 2019.

2.4. Data collection instrument

The Nurse Competence Scale [22,23], which was employed as the data collection tool, is a standardized tool used to measure nurse competence. It consisted of two sections: demographic data and a questionnaire. The questionnaire examined nurse competence and included focus-group questions, which aimed at examining the perception of the nurses about the orientation program.

The demographic data included age, gender, the category of nurses, and years of experience. The Nurse Competence Scale consists of 73 items, which were categorized under five dimensions, namely helping role, diagnostic function, managing situation, therapeutic intervention, ensuring quality, and work role. The items were rated on a 10-point scale ranging from 1 (very low) to 10 (high level), based on the participants' perceptions about their competence in each item. The reliability was 0.9. Permission was sought from the author and Wiley publishers, who own the copyrights of the tool.

Credibility and conformability were achieved by returning a summary of the interviews for checking with five participants and the co-researcher who was available during the interview. Peer checking was done by the authors and two other experts, and the results depicted similar findings. The Nurse Competence Scale is a valid and reliable tool used by many researchers.

2.5. Data collection

Data collection was carried out using the focus group and a questionnaire. The nurse competence before and after the orientation program was compared using a questionnaire. Three focus group discussions were conducted to identify their perspectives about the current orientation program and suggestions for improvement.

2.5.1. Survey

Initially, the new nurses were given self-assessment questionnaires on their competence, and data were collected. A post-test was conducted after three months to ascertain the effect of the orientation program on the nurses. In the post-test, the response rate was 70% (70/100).

2.5.2. Focus-group discussions

The nurse's participants were selected as they could better evaluate the program as participants of the program. The new nurses who completed the three weeks long orientation program were invited to participate in the focus-group discussions. Only 35 nurses were willing to participate in the focus group, and three focus group discussions were conducted immediately after the orientation program. The three focus groups were taken with individuals who can approach the topic from a different perspective to reduce the effect of power relationships and capture a range of perspectives to gain greater insight into the issues. It was ensured that each focus group is comprised of homogeneous participants in terms of age, gender, and the nature of their experience of the issue to avoid the generation of power issues and promote the comfort of participants. The focus group was adequately moderated in a structured manner and ensured that all participants contributed equally to the discussion.

2.6. Statistical analysis

Categorical variables, such as gender, nationality, and training, were presented in frequencies and percentages. Continuous variables, such as age, years of experience, and dimension scores, were expressed as *Mean ± SD*. An independent sample *t*-test was used to determine the mean significant differences between the dimension scores and study characteristics. A two-tailed *P*-value < 0.05 was considered as statistically significant. All data were entered and analyzed with the statistical package SPSS 22 (SPSS Inc., Chicago, IL, USA).

The research utilizes inductive content analysis. The categories are derived from the data. Researchers were guided by the aim and research question of the study in choosing the contents they analyze. The data was organized with open coding, creating categories, and abstraction. The notes and headings are written in the text while reading it. The written material is read through again, and as many headings as necessary are written down in the margins to describe all aspects of the content. The lists of categories are then grouped under higher-order headings. The general description of the research topic is formulated through generating categories. The analysis is inevitably a work of interpretation by the authors, and the writing up was made by the application of reflexive techniques and an open-mindedness concerning the 'truth' of the report.

2.7. Ethical considerations

Approval for the study was obtained from the Institution Review Board of the hospital (IRB Log Number 18–210). Informed consent was obtained from the subjects after explaining the purpose of the study and participation. Participation in the study was purely voluntary, and confidentiality was maintained throughout the study.

3. Results

3.1. Basic demographic characteristics of participants

A total of 70 questionnaires were analyzed. The participants (*n* = 70) were 12 (17.1%) registered Saudi nurses and 58 (82.9%)

registered non-Saudi nurses. The group included more females (58, 82.9%) than males (12, 17.1%). The mean age of the trainees was 29.35 years ($SD = 5.34$). The majority of the participants were staff nurses (67, 95.7%). The mean years of experience of the participants were 5.30 ($SD = 3.30$) (Table 1). About competence, the over gain in competence score is 5.48%. The maximum gain in competence is for the dimension of ensuring quality (7.77%), and the minimum gain is teaching coaching (3.68%) (Table 2).

3.2. Effect of the program on nurse competence

The orientation program had a significant impact on different dimensions, such as helping role, diagnostic function, therapeutic intervention, ensuring quality, and work role. The program did not have a statistically significant impact on teaching coaching and managing situations dimensions ($P > 0.05$, Table 2). There was no significant association between level of competence and demographic variables.

3.3. Qualitative data and description

The focus-group interviews were semi-structured. They were all recorded, listened to carefully, and then transcribed. The transcripts were carefully read several times, and the overall perspective was obtained. The codes were done and categorized under specific categories and subcategories to express the meaning of the transcripts. In the process, a few codes were eliminated, and a few were merged. Four themes emerged out of the codes and categories as follows: organization of the program, the educational content of the program, quality of teaching, and satisfaction with the program.

The main themes that emerged from the focus group were described. While the findings concern mainly on the nurses' views, the discussions with the stakeholders were considered in developing the strategies. In the following section, some of the main themes and categories were described.

3.3.1. Experience with the program

3.3.1.1. *Expectations about the program.* The staff thought that there would be a short orientation about the units and the services offered by the hospital. They expected a presentation on the protocols, policies, procedures, and a tour within the hospital. They mentioned that the program was more detailed and thorough, covering the policies, procedures, skills, and sessions on important topics. This can be reflected in some of the comments

"The program exceeded my expectations."

"I felt the program would be a short presentation about the services of the hospital."

3.3.1.2. *Satisfaction with the program.* The overall description by the participants indicated that the orientation was realistic,

Table 1
Demographic characteristics of participants ($n = 70$).

Characteristics		n (%)
Gender	Male	12 (17.1)
	Female	58 (82.9)
Age, Mean \pm SD		29.35 \pm 5.34
Nationality	Saudi	12 (17.1)
	Non-Saudi	58 (82.9)
Training category	Staff nurse	67 (95.7)
	Charge nurse	2 (2.9)
	Head nurse	1 (1.4)
Years of experience, Mean \pm SD		5.30 \pm 3.30

informative, comprehensive, and educational. It enhanced their knowledge and skills and prepared them to care for patients. The participants further asserted that the program made them confident and had a big professional impact on them. One of the participants felt that it boosted self-esteem and had a huge impact on professional attitude.

"The orientation program is quite satisfying for us because they imparted us all the knowledge and skills."

"After I took the total program, my anxiety level is gone or lessens because I feel more prepared to handle my patient and to communicate with them."

"For me, the orientation program was flawless and with my experience, I can consider it as the best orientation in my experience."

"The orientation program has a great impact on my nursing career. It helps me to boost my self-esteem, and I was well prepared before my exposure to the unit."

3.3.2. Organization of the program

3.3.2.1. *Duration of the program.* The participants expressed varying opinions regarding the duration of the orientation program. Most of them were satisfied with the duration of the program, while a few mentioned that the orientation would be better if it is extended. One of the participants commented that the program was short and the need for an extended program.

"I feel the orientation program is short, and it would be better if they can extend the program."

"I feel the duration of the orientation is quite good that it was able to cover many aspects."

3.3.2.2. *Coordination of the program.* The staff felt that the program should be organized in a step-by-step manner. They were also of the opinion that there should be a map and an orientation manual to help new staff and that there should be someone to contact for guidance whenever the need arises. They further suggested that the change of venue should be avoided, and the program should be organized according to the schedule.

"I feel it is good if a map with the details of the organization is provided, and there is a specific person to contact and guide us in the orientation."

"I agree the orientation should be systematized and organized step by step."

"I think it would be nice if they can manage the orientation program in one classroom."

"They did not give us an allotted day to tour for the hospital alone itself to be familiar with all the facilities and that is very much important for us during the transfer of the patient."

"We are hoping that there is someone available for the new nurses because it is quite hard for us to work without guidance."

"I feel it is good if they give us the map of King Fahad Medical City (KFMC), so we know where to go. There should be a standard way of where or to whom you will approach, and one person should be assigned for us to contact."

Table 2
Pre- and post-test analysis on competence of participants (n = 70).

Dimensions	No. of items	Maximum score	Pre-test (Mean ± SD)	Percentage of mean score (%)	Post-test (Mean ± SD)	Percentage of mean score (%)	Percentage of gain (%)	t	P
Helping role	7	70	48.66 ± 10.17	69.51	51.96 ± 9.55	74.23	4.72	1.98	0.05
Teaching coaching	16	160	111.09 ± 24.38	69.43	116.97 ± 24.56	73.11	3.68	1.42	0.16
Diagnostic functions	7	70	48.09 ± 12.04	68.70	52.49 ± 10.26	74.99	6.29	2.33	0.02
Managing situations	8	80	55.81 ± 13.05	69.76	59.53 ± 12.29	74.41	4.65	1.74	0.09
Therapeutic interventions	10	100	65.57 ± 18.19	65.57	71.91 ± 16.04	71.91	6.34	2.19	0.03
Ensuring Quality	6	60	39.14 ± 10.79	65.23	43.80 ± 10.08	73.00	7.77	2.64	0.01
Work Role	19	190	131.39 ± 33.47	69.15	143.10 ± 29.46	75.32	6.17	2.20	0.03
Total score	73	730	499.74 ± 115.42	68.46	539.75 ± 105.96	73.94	5.48	2.14	0.03

"The orientation program should offer us handouts to read in advance for the presentation, so that will be an interactive program."

"I feel it is better if there enough availability of it or computers, to access the intranet and do the online competencies."

"I also suggest a specific time for online competencies because we are running out of time to do the online courses."

3.3.3. Educational content of the program

3.3.3.1. Clinical-skill workshops. The participants reported that the clinical-skills workshop was very useful because it allowed them to get exposed to the specific competencies required, and they were able to practice essential skills. They were taught regarding the use of various equipment and prepared to be employed in the specific units. They also indicated that the clinical skills provided by the workshop gave them the confidence to interact with patients. One of the participants thought that the clinical-skills workshop helped and equipped with the skill to provide effective patient care. Another participant further suggested that it would be good if they were exposed to teaching that includes scenarios and discussions on the common conditions the new nurses are likely to encounter in their employment units.

"I would say the clinical skills workshops were educational for us and went beyond and taught about dealing with patients, specific practices, and procedures that help inpatient care."

"I agree that the clinical skills workshops were helpful to improve our performance in the clinical area."

"I would like to say the clinical workshops provided us with the competencies that apply to a specific area."

"It would be good if the clinical skills workshops include scenarios and discussions on the common conditions in the units."

3.3.3.2. Online competencies. The participants opined that new nurses should be taught how to access online competencies, and computers should be made available to facilitate that. Online competencies require a longer time to acquire. One of the participants felt that they refreshed her knowledge, and another participant suggested that a specific time should be provided to complete the online competencies. They suggested that it would be good to have a hard copy of the online modules. The participants were also of the opinion that a specific time should be provided to complete online modules and assignments within the program.

"The online courses help me to review my previous knowledge, and I gained additional information about changes and new ideas."

"I recommend there should be a specific time for the online competencies and facilities and computers to do the competencies within the program should be arranged."

3.3.3.3. Educational sessions/topics. The staff felt that the content was organized, and the Arabic lesson was informative. There were many presentations, but only a few of them were practical. There were no presentations on administrative formalities such as Human Resource Department formalities. Also, there should have been a general staff orientation tour in the schedule and detailed presentations on components of the systems used in the hospital, such as RMS, Cortex, and Datix. That would have provided awareness about the accreditation process and the specific topics related to it. One participant indicated that "The sessions provided awareness of accreditation bodies", while another one opined that "They should lengthen the time for specific topics that involve nurses."

"I am happy about the Arabic lesson, and it was very useful for us."

"The sessions created awareness on accreditation, but it was not very specific."

"The educational sessions give us awareness of how we will do our work perfectly without any mistakes, especially when dealing with lives."

"It's better to have a copy of the slides and a copy of the presentation before the sessions so that it helps us in the discussion."

"I think it is very helpful if they give us any presentation prior and give a specific time to clarify our concerns about the presentations."

3.3.4. Quality of teaching

3.3.4.1. Perception about the clinical instructors. The participants found the clinical instructors to be educated and well trained; they were well prepared, very helpful, and they taught and guided them effectively. According to the participants, the clinical instructors explained the competencies according to nursing policies and procedures. One of the participants indicated that the clinical instructors guided them in all situations.

"The teachers and clinical instructor are knowledgeable, skillful and helpful in the orientation, especially the clinical skills workshops."

"We like our clinical instructor, who was available to guide us in performing the competencies and preparing us to be exposed to our areas."

"It's very nice to have time with our clinical instructors, and they taught us the policies and to deal with different types of equipment."

3.3.4.2. Perceptions about the presenters and teaching strategies. The participants mentioned that presentations and the presenters were the best part of the program; they gave an audiovisual experience. However, some participants felt that some presentations were quite long and just theoretical (without practical examples), thus resulting in poor interactions and boredom. The participants complained that a few presenters were late, which cause the presentations not starting on time. They thought that it is better to have handouts for all the sessions before the presentations and that there should be a change in the teaching strategies. However, one of the participants thought the presenters were effective, and another suggested that it would be good to have a workshop for the presenters and prepare them to present effectively.

"I think the presentation was quite long and could be lessened, and some presenters are just reading their PowerPoint without any explanation on the topic."

"The presenters should be selected according to some criteria like English language efficiency, knowledge about the topic, and presentation skills."

"There should be a workshop for all the presenters, on presentation and communication skills to deal with the newly arrived staff."

"Most of the presenters know about the topic, but they do not know how to present the topic."

"It would be nice to have interactive discussion sessions, case scenarios, and not literally like a seminar type of teaching."

"I think some of the lecturers should change their teaching strategies. We get bored, and they should involve us and make the sessions interactive."

Overall, the orientation program proved to be beneficial for new nurses. The nurses mentioned that the orientation program was useful for enhancing their competence, which is reflected in some illustrative comments to the questions in the focus group. From the feedback given by the nurses, it is clear that the orientation program served its function by empowering them and enhancing competence. Regarding the organization of the program, most nurses suggested that the orientation program can be better organized with proper guidance. It was empowering and provided clear information on many topics and what they had to do. They emphasized the need for a map with a specific person to contact and guide them for any queries. The topics and the teaching strategies, however, did not satisfy all the nurses. Representative comments and suggestions on how to improve the program were on teaching strategies and presentations. Suggestion on using various teaching strategies and providing the content before the presentation was recommended to help to build a passion for discussion and learning. The selection of presenters should be based on specific criteria, and training for them should be conducted to light-up their presentation and communication skills. Furthermore, nurses said that the orientation was effective because it uses real demonstrations that may help inpatient care. This may have motivated them to do the demonstration as it has a clear purpose for developing their skills and confidence and has real value on their unit.

3.4. Action plan to improve the orientation program

Meetings were held in different phases of the research, and the researcher engaged the director of the Nursing Education Administration, the head of the nursing orientation program, and the coordinator of the program in the discussions. The major problems identified were related to the program's organization, the educational content, the quality of teaching, and the clinical skills workshop. The strategies/action plan was made based on the findings of the research and considering the views of the participants. Strategies developed to enhance the orientation program are listed below.

3.5. Organization of the program

The program is organized well. The duration of the program was made three weeks after meetings with the expert team. The program will be conducted in a specific venue. The first week of the orientation program was designed for the administrative requirement like signing the contract, medical exam, institution user ID, specific weeks for the lectures, and specific weeks for the competence training in the skill lab. The program has made a fixed schedule in the orientation program to do the online competencies.

The Arabic lesson, which was considered essential by the new nurses to communicate with the patient, was made online and is standardized by an esteemed educational body.

A particular person in general nursing orientation program was assigned and will be available for any guidance.

3.5.1. Quality of teaching and educational content

Few lectures were not essential and were deleted, and few were added based on the recommendations and the requirement of accreditation bodies. The presentations are sent to the participants before the program.

Using various teaching strategies and providing the content before the presentation will be helpful to build a passion for discussion and learning.

Selection of the presenters will be based on some criteria, and training for the presenters will be provided to light-up their presentation and communication skills.

The general staff orientation module, which includes all the components of hospital orientation, was made online and available for the new staff to access.

3.5.2. Clinical skills workshops

The clinical skills workshops are planned to organize in the simulation lab, where the nurses have the opportunity to practice the skills.

4. Discussion

For the past few years, the nursing education administration has been providing a compulsory General Nursing Orientation and Preparation for Practice Program. This program orients new nurses to the policies and procedures in the field of nursing and teaches them basic concepts that can enhance their competence at work. This study aimed to evaluate the current orientation program for new nurses using action research and provide recommendations on how to improve orientation programs. This aim is supported by the findings of a study [24]. The results revealed that the orientation program had a significant impact on nurse competence. This is consistent with previous reports [25–27], which reveal that orientation programs have a positive effect on nurse competence. The findings of the focus group show that overall, the participants achieved good competence. Published findings corroborated this.

Moreover, it revealed that after the orientation program, nurses became more professional in carrying out their duties. This is supported by the findings of a study [28], which shows that after orientation, nurses became more experienced in patient-related tasks. Nurses vary in their competence and their experience impacts their competence.

Available research reports indicate that nurses were found to be competent in patient-related nursing tasks, maintenance of professional competence, and ethical care. They were weak in teaching coaching and the use of evidence-based knowledge [28,29]. Another study supports the view that nurses lack evidence-based knowledge and stresses their integration as an educational intervention to help them provide the best care for patients. These aspects need to be considered when designing orientation programs [30].

The current study did not reveal any significant relationship between the competence of nurses and demographic variables. This is contrary to the findings of [2], which reported a significant difference in the level of competence related to the nurses' work experience. The findings of this study further revealed that nurses gain expertise, skills, experience, and collegial relationships. This was supported by the findings of [3], which reveal that the orientation offered to new employees allows them to develop competency, experience, and overall knowledge of their responsibilities in a clinical setting. The findings from the focus group also revealed that the orientation program provided nurses with the assurance that they were supported by clinical instructors, who are knowledgeable and skilled professionals. This is in accordance with the study finding, which reported that educators played a vital role in orientation programs [15,31]. The participants in this study expressed the need for professional support throughout the orientation phase, which is corroborated by the findings of various reviews [24,32–34]. The present findings also revealed that the orientation program improved the clinical competence of nurses, which is supported by the findings of [5]—the authors showed that the orientation program provides clinical skills to new nurses. The present findings show that the orientation program improved the knowledge and confidence of new staff. This is in agreement with other study findings [35,36]. A study also found that the orientation program resulted in an increase in trust and enabled new nurses to work independently [37].

The present results also revealed that the participants expressed the need for inclusion of a didactic method of instruction and case studies, including case-based exercises, in the program. This is in agreement with the study findings, which state that there should be a balance between taught and self-directed elements [38,39]. Furthermore, the current study found that the participants required different delivery approaches in the orientation program, completion of assignments was stressful, and they needed a toolkit. These findings are in agreement with previous reports [40–42]. Few available research reports have highlighted the shortcomings of the current orientation programs for new nurses.

Orientation programs orient nurses to policies and psychomotor tasks and give little attention to the practical components of nursing and how to “be with” patients [43]. It is, therefore, suggested that the teaching strategies in the orientation programs need to be effective and innovative [44]. This outcome is corroborated by the results of a study, which recommends the need for more didactic instruction, hands-on learning, and preceptor support [45]. The participants reported that they were satisfied with the program because it improved their confidence and skills. This is in agreement with the study results, which state that orientation programs improve patient care management and the self-esteem of the participants [46].

Lack of a structured transition program in specialized areas was identified as a contributing factor to nursing dissatisfaction and

increased turnover in specialized units [45]. The participants in the focus group also revealed that the orientation needs to be structured. It is further assumed that nurses require orientation and competency programs. These programs enhance their competence and success as professionals [24]. Health organizations provide general orientation as a requirement for workplace health, safety standards, and contractual negotiations, and unit-specific orientation for preparing new employees for the work environment [32]. Training during the orientation period should be comprehensive, individualized, and include all the necessary skills without an assumption of proficiency in basic skills [47]. The participants in the present study have varied views about the duration of the program. Few were satisfied with the duration, while some recommended an extended program. Various studies have different views on the duration of the orientation program. Orientation should last for at least four weeks and also be based on the previous experience of the involved nurse [32]. Extensive orientations are required to further assure the competency of budding nurses [48]. These indicate the duration of the program need to be planned based on the competence and experience of the nurses.

The present study indicated that the orientation program helped empower nurses and improve their competence. The primary outcome of the research is that the program should be modified to include the views of the new nurses who are the beneficiaries of the program and laid strategies in the establishment of a well-defined orientation program. Furthermore, in the interviews, they reported that the organization of the program, availability of program materials, and the availability of a person during the program led to more effective learning. Since the nurses are in the program for the entire day, they have no time to complete their assignments within the time frame. However, employing the software devices, they find their own time to do their online competencies. Thus, through their desire to learn and their willingness to learn, they managed to do their assignments. The diverse pieces of literature considered here indicate diverse views about the orientation program and the concomitant need for a well-designed orientation program. However, to date, we have few empirical insights into new nurses' views towards the nursing orientation program, and the influence of essential topics, well-trained presenters with various teaching strategies, helped to develop ideas to enhance the orientation program.

Hospitals/health care settings will benefit from this study by redesigning the orientation program considering the views of the beneficiaries. The orientation program should no longer be dominated by educational sessions using old methodology but should include new teaching strategies and innovative delivery methods. Adopting these strategies adds variety to the content of the orientation program and making it fun and interesting for the nurses to improve their competence.

Current research validates this view that orientation program increases the competence among nurses and consequently leads to improving the quality of care in the health care setting. The study finding and suggestions were discussed with the stakeholders in the nursing education department conducting the orientation program. Changes to the new orientation plan were made based on the study finding with collective discussion. The intervention paved the way for enhancing the new orientation program, covering the views of the nurses and the stakeholders in the nursing education department.

Limitation: The study is limited to a particular setting and a limited sample size, thereby limiting the generalizability of the findings. The main limitation of this study is its subjective evaluation (based on the participants' perceptions about their competence) of the competence of participants. The influence of the research process and interpretation on the part of the researcher

poses a threat to successful content analysis. The researchers acknowledge that many factors, such as age, nationality, time, and previous experience may have shaped the findings. The conclusion was based on the integration of the views of the participants and strategies that were developed after discussion with the stakeholders and the participants.

5. Conclusion

An orientation program plays an important role in guiding new nurses. It should be well organized and include apt content, teaching strategies, a support system, and evaluation methods. The primary outcome of the research is that the current orientation program improves the level of competency among new nurses and has a positive impact on new employees. Therefore, orientation programs should be designed from new employees' perspectives to maintain engagement and create positive experiences for new employees.

The findings concluded that an effective orientation program should enhance the knowledge and competence of new nurses and prepare them holistically to demonstrate their competence in the new environment. A well-designed orientation program should also consider the views of the beneficiaries, include both general and unit-specific orientation, and give special emphasis on the content and teaching strategies.

CRedit authorship contribution statement

Diana S. Lalithabai: Conceptualization, Methodology, Software, Data curation, Writing - original draft, Formal analysis, Writing - review & editing. **Wael M. Ammar:** Conceptualization, Methodology, Investigation, Visualization, Validation, Writing - review & editing. **Khalid S. Alghamdi:** Conceptualization, Methodology, Writing - original draft, Formal analysis. **Ahmad E. Aboshaiqah:** Writing - review & editing.

Declaration of competing interest

The authors declare that there is no conflict of interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijnss.2021.01.002>.

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