Explaining the Facilitating Individual Characteristics of Clinical Development in Nursing Undergraduates

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Abstract: Background: The individual characteristics of nursing undergraduates play an important role in their clinical development and identifying the facilitator's characteristics can help to increase the effectiveness of educational programs in order to achieve the appropriate clinical practice (performance). Objective: The present study was conducted with the aim of explaining the facilitating individual characteristics of clinical development in nursing undergraduates. Methodology and Participants: This qualitative study was conducted by using a conventional content analysis approach. In order to achieve a wide range of experiences, views and maximal variance in data, 17 senior nursing undergraduates, 6 nursing clinical instructors and 4 working nurses in medical centers were included in study based on the purposive sampling method. Data were collected by using semi-structured interviews. After recording and transcribing the interviews, content analysis was used to extract the concepts. Findings: According to the participants' experiences, the facilitating individual characteristics of the clinical development included "respectful behavior", "individual dynamics", "initiative", "self-esteem" and "appropriate nursing mentality". Conclusion: The present study Identified students’ characteristics which play a pivotal role in achieving clinical development. In order to achieve clinical development in nursing undergraduates, instructors and educational authorities should identify the students' impressive characteristics and applying the right strategies in order to develop and strengthen these qualities.

Keywords: clinical development; individual characteristics; nursing undergraduates; qualitative content analysis.

1. Main text

Nursing education is a part of the country's higher education system which has an undeniable role in providing human's health and considering its quantitative and qualitative aspects is of great importance (Chan, So, & Fong, 2009; Farzi, Shahriari, & Farzi, 2018; Ironside, Mc Nelis, & Ebright, 2014; Sezer, 2018), in which clinical education is an integral part of nursing education and encompasses about more than half of nursing education programs (Hasanpour-Dehkordi & Shohani, 2016; Vahabi et al., 2011). This stage (clinical education) is recognized as the heart of professional nursing education; because theoretical subjects which were taught are learned clinically, clinical skills are taught and it would be possible to cause students understand the area of clinical practice facts (Pazokian & Rassouli, 2012; Ramani & Leinster, 2008). The general purpose of clinical education is to increase the students' skills and abilities in order to providing comprehensive, effective and efficient care for patients (Goli-Roshan, Aziznejad-Roshan, & Gholizadah-Gardrodibary, 2017). Skills are formed and promoted in the area of clinical practice, which increases the ability to act with speed and decision, make a judgment, have sense of responsibility and adapt to the environment and the student can prepare him/herself for future, who has to take care of the patients independently and sometimes solely. Thus clinical development is a key component of clinical education (Barkimer, 2016). According to the previous studies, various effective variables have been identified in the students' clinical development which include individual and internal characteristics of students (Beauvais, Stewart, DeNisco, & Beauvais, 2014). These characteristics can be considered as a connected chain which can range from favorable features to unfavorable ones (Ghahremani, Amini, Aghvamy, & Roohani, 2016). The type of students' individual characteristics has a direct impact on their clinical development, so that in clinical competence acquisition, its role is beyond intelligence (Baramee & Blegen, 2003; Ghaedi Heidari & Toghiann Chaharsooghi, 2014). Individual characteristics cause each student has her/his own different function and plays a different role as a student (Beauvais et al., 2014; Ghahremani et al., 2016). Since individual characteristics play an effective role in the development of clinical capabilities and development. Recognizing it can also act as an influential and powerful teaching aid and lead to increase the impact of educational programs to achieve appropriate clinical practice (performance). Therefore, the present study was aimed at explaining the facilitating individual characteristics of clinical development in nursing undergraduates.
2. Method

This qualitative study was conducted by using a conventional content analysis approach. In order to achieve a wide range of experiences, views and maximal variance in data, 17 senior nursing undergraduates, 6 nursing clinical instructors and 4 working nurses in medical centers were included in study based on the purposive sampling method (Table 1). Data were collected by using semi-structured interviews. The interviews with the students were conducted in an interview room located in the Faculty of Nursing. The Interviews with clinical instructors were also conducted in their offices in the Nursing Faculty and for the nurses the interviews were held in clinical field classes. At the beginning of the interview, questions were asked to familiarize the researcher with the participants, as well as creating a relaxed and not tense atmosphere. Subsequently, participants were asked to describe their experiences of those individual characteristics that facilitated students' clinical development and then more specific questions were asked along the lines of research purpose. The interviews were discontinued when data saturation was achieved after 27 interviews. The researcher, after obtaining the participants’ consent, recorded all the interviews by a cassette recorder in order to ensure that all participants’ speeches are kept. Each interview lasted an average of 45 minutes.

Table 1. Individual profile of participants.

<table>
<thead>
<tr>
<th>Participant number</th>
<th>Age (year)</th>
<th>Gender</th>
<th>Marital status</th>
<th>Semester</th>
<th>GPA</th>
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<td>14.5</td>
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<td>8</td>
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<tr>
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<td>7</td>
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<tr>
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<td>8</td>
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<tr>
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<td>21</td>
<td>female</td>
<td>single</td>
<td>7</td>
<td>16.07</td>
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</tbody>
</table>
3. Data analysis

Content analysis was used to analyze the data according to Graneheim and Lundman (2004) point. Graneheim and Lundman suggest the following steps to analyze the content of qualitative data: 1) Transcribing the recorded content of the interview immediately after interviewing 2) Reading the transcribed contents to grasp the whole concepts 3) Determining the Semantic codes and initial codes 4) Categorize the same initial codes in more comprehensive categories 5) Determining the main theme of categories.

The recorded content of the interviews was carefully transcribed verbatim after being played several times. After accurate reading of the transcribed contents, Semantic units were identified and coded. At this stage, the initial codes were generated as implicit codes. Then, the codes were merged and classified according to similarities. It is tried to have the most homogeneity within the categories and the most heterogeneity among the
categories. Data were analyzed by using the MAX.Q DA-10R250412 software.

3.1. Ethical considerations

In order to comply with ethical considerations, the research obtained approval from the Regional Ethics Committee of Medical Researches (with the ethics code: IR.UMSHA.REC.1396.113) prior to the beginning of the study. The researcher also introduced himself to the participants, explained the research purposes, and obtained their written consent while assuring them that the obtained information would be treated as strictly confidential.

3.2. Trustworthiness

In this study, in addition to long engagement with data and spending time on data collection and analysis, transcribed interviews were independently coded and classified by the researcher and the obtained patterns were compared with each other subsequently. The coded texts were also resubmitted to six participants in order to examine the adaptation of the selected codes to their experiences. To examine dependability, external observers (two nursing assistant professors who were dominated the qualitative research method from other universities) were asked to examine the similarity between their own perception and the researcher as well as finding the contradictory items.

4. Findings

According to the participants' experiences, the facilitating individual characteristics of the clinical development included "respectful behavior", "individual dynamics", "initiative", "self-esteem" and "appropriate nursing mentality". (Table 2)
Table 2. Theme, sub-themes, the codes of facilitating individual characteristics of the clinical development

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-themes</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful behavior and demeanor</td>
<td>Good social relations</td>
<td>Sense of humor</td>
</tr>
<tr>
<td></td>
<td>Morality</td>
<td></td>
</tr>
<tr>
<td>Individual dynamics</td>
<td>A high level of motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having a goal</td>
<td></td>
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<tr>
<td></td>
<td>Having perseverance</td>
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<tr>
<td></td>
<td>Being interested in learning</td>
<td></td>
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<tr>
<td></td>
<td>Being distinct</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Promptitude and military precision</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taking advantage of difficult situations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in order to develop</td>
<td></td>
</tr>
<tr>
<td>Initiative</td>
<td>Flexibility of mind</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ability to solve the problem creatively</td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>Having a lot of confidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not being under stress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Having great daring</td>
<td></td>
</tr>
<tr>
<td>Appropriate nursing mentality</td>
<td>Being patient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to deal with difficulties</td>
<td></td>
</tr>
</tbody>
</table>

4.1. Respectful behavior and demeanor

Characteristics such as good social relations, morality and sense of humor were clear examples of respectful behavior and demeanor. Students with good social relations could communicate with other people easily, such as instructors, nurses, patients, and even other students, which led to accept them by others. One of the nurses expressed her experience in this way:

"There was a student who was communicating effectively to all personnel and he always had a great respect of them no matter who they were (nurses, clinical assistants, patient services assistants, porters and ward clerks) and what they did - in other words, he had good social relations. So he had gained the respect of personnel. I liked his characteristics of a good and active student. Therefore, whenever I worked a shift, I was keen to cooperate with him and I was trying to teach him some points of nursing during the shift which he should observe to be an efficient nurse." (P12)
Morality or observance of moral principles while communicating with others, was considered as one of the key factors in gaining others' trust, especially patients and their attendants, to collaborate with students. Students with this characteristic had a special privilege to developing their clinical skills. In this regard, one of the students expressed his experience in this way:

"According to my experiences, if you would be on your best behavior at patient no matter you are a skillful student or not, he/she will put his/her trust in you. I have seen lots of nurses before who were expert and well-educated, but they did not succeed to gain patient’ trust, only because they did not reward good behavior towards patients." (P25)

According to some participants’ experiences, not only do the students with sense of humor show good mood against some tense atmosphere in the area of clinical practice, but also they are extremely flexible in their interaction with others. In this regard, one of the instructors expressed her experience in this way:

"My students and I were in orthopedic ward. In time, a doctor had ordered a blood test for a patient several times before and nurses had taken the blood sample. When the doctor ordered it again, nurses refuse to take it because the patient had been agitated. Meanwhile one of my students talked with the patient about the issue in a good humor and with a good behavior (he had a sense of humor too). He explained to the patient what the matter is. Finally the patient gave his consent to take his blood sample. It was just because of my student’ sense of humor and good treating with patient. "(P21)

4.2. Individual dynamics

Individual dynamics was a very effective factor in student's clinical development (engine of clinical growth). Individual dynamics was characterized by characteristics such as a high level of motivation, having a goal, having perseverance, being interested in learning, being distinct, promptitude and military precision, and taking advantage of difficult situations in order to develop. Having a high level of motivation as the main effective factor, played a very important role in accelerating the development of students' clinical skills. In this regard, one of the instructors expressed his experience in this way:

"The majority of nursing students have a high level of motivation and they are interested in learning medical skills. They do not want to be weak with their major and they are supposed to be skillful experts in nursing. "(P7)
One of the students stated in relation to the role of having goal and perseverance in his clinical development:

"I always have an aim. I have to do all the things correctly, otherwise I cannot calm down. To me it’s a kind of perseverance and that’s my characteristic." (P27)

The interest in learning was another characteristic of individual dynamics. In this regard, one of the students expressed her experience in this way:

"There is a great tendency for me to learn new medical skills and it’s very attractive to me (it’s not boring). There have been many times before when I was exhausted and I wasn’t in good mood but I’ve tried to learn more even when it was something repetitious. I always asked about the things I didn’t know." (P10)

Some students tried to distinguish themselves from the others with developing their clinical skills and this distinguished view as a motivational factor in achieving clinical success was very helpful. In this regard, one of the students expressed her experience in this way:

"I have always tried to reach the top of my profession and to be more actively involved in learning skills than others. I’ve tried desperately to do things as efficiently as possible. In this way, all of the personnel can tell the difference between you and the others. Something like this has happened to me in surgery ward. It encourages me to be a successful nurse." (P20)

Promptitude and military precision were to describe students who, in addition to taking the procedures promptly with a good function of their psycho-motor system while performing clinical trials, showed such precision. One of the students stated that:

"There are some students who perform the medical procedures quickly but not correctly and principally. However, there are also some students who can perform these procedures promptly on principle and correctly with military precision." (P5)

In facing with a serious problem or incident in health care, not only are some students more tolerant and adaptable than the others, but also they consider it as an opportunity to take advantage and to promote their capabilities with a positive attitude towards such situation. One of the students stated that:

"I’m kind of student who can easily adapt myself to the new and difficult situations. I can gradually change my behavior and attitudes in order to be successful in a new and difficult situation. I don’t react angrily and badly to hard situations. Instead, I try to take it as an opportunity to take
advantage and promote my capabilities. I can remember that I had nursing management internship and I was served in orthopedic ward. The ward’s head nurse was a real disciplinarian. She made me work hard and every day I had to do some special duties and be on time every day. Even she tried to get on my nerve in order to see my reaction. Despite all of these, I tried to adapt myself and to take it easy. I’ve taken advantage of this difficult situation in order to develop. Finally, she approved me as a disciplined student and I passed the internship successfully." (P27)

4.3. Initiative

Concepts like the mind flexibility and the ability to solve the problem creatively defined the initiative. This characteristic enabled students to be able to solve their clinical problems in an innovative approach. In this regard, one of the instructors expressed her experience in this way:

"There have been several times that I’ve seen the patient who did not cooperate with my students. Once I saw that one of my students wanted to take patient’s blood pressure in an unusual time (out of routine times). I’ve asked him why you did such thing. The student told me that the patient is not keen to cooperate with me and he came to this result that maybe if he take patient’s blood pressure he can communicate with the patient. Personally I think it’s a kind of initiative." (P21)

4.4. Self-esteem

Self-esteem includes having a lot of confidence, not being under stress and having great daring. This characteristic would enable students to cope with their challenging clinical issues by relying on their self-confidence and abilities. One of the students stated that:

"When I was passing my internships, I didn’t scared off (to be under stress) to have failure or not to perform a medical procedure completely correct because I had great daring. I knew that I may have some failure in medical procedures as a nursing student and it’s normal because I was not experienced enough. For instance, if a student refused to make a fist, I would try it voluntarily." (P27)

4.5. Appropriate nursing mentality

The grueling nature of nursing, puts it among the professions which require the entry of students with the appropriate mentality such as being patient and able to deal with its difficulties. Patience is one of the most important features of nursing care and also is a nursing symbol. One of the nurses stated that:
"The nurse is known as a patient person. If students supposed to be successful in this major, at first they have to be patient and accept difficulties without becoming angry. They have to calm down in tense situations." (P11)

One of the nursing instructors emphasized the need for high levels of tolerance and ability to cope with problems:

"I've always told my students that nursing is known as a grueling major and you have to deal with its difficulties for good. If you don't have a good mentality towards it, you would not be able to deal with it now and in future." (P17)

5. Discussion

In this study, one of the facilitating characteristics, was "respectful behavior and demeanor". It means to treat individuals with respect to their physical and mental integrity and to build a valuable and constructive human relationship in interaction with different people (Clucas & Chapman, 2014; Lalljee, Laham, & Tam, 2007). The components of this characteristic were described as morality, sense of humor and good social relations. Morality is defined as the observance of moral principles in communication with professors, patients and their families, nurses and other students. It plays a pivotal role in improving and regulating students' relationship with professors, nurses and patients in the area of clinical practice which can be effective in clinical skills acquisition and development. Regarding the importance of having a sense of humor, Lefcourt and Martin at the University of Western Ontario, stated that it reduces mood of depression, fatigue, anxiety, confusion, and anger, in addition to cut the tension off (Martin & Lefcourt, 1983). Last researches have indicated that nursing students are affected by several stressors in the area of clinical practice, which can lead to bring about clinical development and acquisition change (Hoffman & Donaldson, 2004; Pulido-Martos, Augusto-Landa, & Lopez-Zafr, 2012). Students who have a sense of humor, in addition to being able to build close interpersonal interactions, are able to apply a better coping strategies against stressful incidents, and their locus of control becomes internal (Chauvet, & Hofmeyer, 2007; Ford, Lappi, & Holden, 2016; Ghaffari, Dehghan-Nayeri, & Shali, 2015). Individual dynamics was a very effective factor in student's clinical development (engine of clinical growth). This characteristic cause students to be very active and consciously accept full responsibility of their clinical development and open up ideal opportunities for optimizing the clinical practice and accelerating the clinical development, in order to cope with the challenges they would face in their
clinical development process. Having a high level of motivation as the main effective factor, played a very important role in accelerating the development of students' clinical skills. Motivation has a pivotal role in orienting goals, learning strategies as well as self-regulation and, ultimately, educational achievement in students (Jannesar Hoseinie, Farmanbar, & Pourshaikhian, 2014; Mäenpää, Pyhältö, Järvenoja, & Peltonen, 2018; Rose, 2011). The ability to generate multiple ideas, or to have a flexible mindset, was one of the other individual attributes that helped students to achieve clinical development. The flexibility of the mind makes it possible for students to come up with different solutions to the clinical issues. Also, students who have the ability to solve the problem creatively (innovative approach) provide better care for patients, and are able to make tough decisions in case of clinical problems. Several factors can play a role in student initiative. One of them is self-esteem. Self-confidence (as a part of self-esteem) plays a role in creativity and the expression of ideas (Wang & Wang, 2016). Students who have absolute confidence, are more willing to step out of their comfort zone and express innovative ideas (Chan, 2013). According to participants' experiences, self-esteem includes having a lot of confidence, not being under stress and having great daring. Students who possess a full confidence, believe that they can achieve their clinical purposes. Confident students will engage in challenging goals, whereas their less confident peers will refuse to engage the very same situations. Confident students will also approach difficult skills with lower anxiety, perceive clinical skills as needed and important tasks to learn, and have much more commitment to their job (Lundberg, 2008). Therefore, self-esteem motivates attempts to achieve clinical development. Nursing as a career (profession) requires some qualities such as patience, self-restraint, good social relations, spirit of cooperation and helping others, sense of responsibility and loving humanity (Adib-Hajbaghery & Dianati, 2005). Appropriate mentality such as being patient and able to deal with its difficulties are the most important features of nursing care and also are nursing symbols. These characteristics make it easier for students to achieve clinical development (Abbaszadeh, Borhani, & Mohsenpour, 2010).

6. Conclusion

Clinical education is a vital component of nursing undergraduate course. The purpose of clinical education is to achieve the students' clinical development by promoting critical thinking and raise students' self-esteem in their ability to perform professional responsibilities. The most important and
influential factor in achieving this purpose is the students themselves. In order to achieve clinical development in nursing undergraduates, instructors and educational authorities should identify the students’ impressive characteristics and applying the right strategies in order to develop and strengthen these qualities.

Acknowledgments

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Contributors: KO contributed substantially to conception and design, analysis and interpretation of data, drafting the article and final approval of the version to be published. FA contributed substantially to conception and design, analysis and interpretation of data, Drafting the article and final approval of the version to be published. AM contributed substantially to conception and design, analysis and interpretation of data, Drafting the article and final approval of the version to be published. YM contributed substantially to conception and design, acquisition of data, analysis and interpretation of data, Drafting the article and final approval of the version to be published.

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References


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