Chapter – 5
DISCUSSION

The present study aimed at evaluating the effectiveness of communication skills training program among undergraduate student nurses. For this purpose Quasi experimental-control group pretest post-test research design was adopted. Communication skills training program was considered as independent variable of the study and four variables like Knowledge of nurse-patient communication skill, Attitude towards nurse-patient communication skill, Self perceived Nurse-patient communication skills and Observed nurse-patient communication skills were considered as dependent variables. Comparison of communication skills with other socio-demographic variables like age, domicile, religion, mother tongue, family type, number of siblings, birth order, opting nursing course, health workers in family and chronic illness in family and previous exposure to communication skills training program were carried out in order to verify if these factors are affecting communication skills of a nursing student. The findings are discussed in the context of the available empirical and theoretical research literature.

The discussion is organized in the following order

1. Knowledge of nurse patient communication skills
2. Communication skills training program on attitude towards nurse-patient communication skills
3. Communication skills training program on self-perceived nurse patient communication skills.
4. Communication skills training program on observed nurse patient communication.
5. Correlation between the knowledge, attitude, self-perceived and observed nurse patient communication skills.
6. Association between the knowledge, attitude, self perceived communication skills and observed nurse patient communication skills with selected demographic variables.
Section I: Knowledge of Nurse-Patient Communication Skills

On comparing the pre and post test scores of knowledge of nurse patient communication skills in Experimental group (Table 4.1); it was found that the mean score of post test was significantly higher than the mean score of pre test. Similarly, mean gain score of Experimental group was significantly higher than that of the Control group (Table 4.2), showing that the training program was effective in improving the knowledge of nurse-patient communication skills. On the other hand, no significant difference was seen between the mean scores of pre and post test for knowledge of nurse patient communication skills in the participants of the Control group (Table 4.1).

Steckler (2012), in her study using a specialized COMFORT curriculum, developed by Wittenberg et al (2010) which is primarily a communication training module for breaking bad news in oncology setting, found that the participants attained adequate communication knowledge as a result of training. Cardoza and Hood (2012) also reported that the simulation program had brought in a significant difference in the level of knowledge on communication skills among the senior baccalaureate nursing students. Liaw, Scherpier, Rethans and Klainin-Yobas (2012) compared the knowledge on communication skills before and after a communication skills training program and revealed that significant improvement was observed in the knowledge among students in experimental group and proved the achievement of the communication training program. In the present study, though researcher had used an indigenously developed and socio-culturally appropriate training module, there was significant change in the knowledge of the participants.

Studies had focused on enhancing the knowledge on communication skills of nursing students to develop a supportive ward atmosphere during care of patients with cancer using communication skills training program (Imran, 2013; Younis, Mabrouk, & Kamal, 2015). In Indian context, Prasad & George (2014) assessed the effectiveness of the structured teaching module on therapeutic communication and they found it effective in improving the knowledge on therapeutic communication. However their study focused on therapeutic communication, whereas the present study focused on the basic component of knowledge on nurse -patient communication.
It is evident that in spite of having communication skills in the regular nursing curriculum, there is a persisting lack of knowledge of communication skills among the student nurses. This may be due to lack of emphasis on imparting the communication skills in the regular nursing curriculum. Since the nurse-patient communication skills is of utmost importance in effective patient care, the findings of the present study evidences the emerging need for the unique communication skills training program in order to enhance knowledge on communication skills.

**Section-II - Communication skills training program on attitude towards nurse-patient communication skills**

On comparing the gain scores of attitude towards the nurse-patient communication skills within the Experimental group (Table 5.1) there was a high significant difference noted after attending the communication skills training program. Similarly, the comparison of gain scores of attitude towards nurse-patient communication skills, the mean score of Experimental group was found to be higher than the mean scores of Control group (Table-5.3). However, there was no significant difference observed between the attitude towards the nurse patient communication skills within the Control group student nurses (Table 5.2). It is evident that the improvement in the attitude is influenced by the exposure to communication skills training program.

The comparison of the four factors namely Learning, Importance, Success and Quality of the attitude towards learning communication skills showed significant differences. Comparison within Experimental group showed three factors except Importance to be significant (Table 5.1). Whereas, on comparing within the Control group (Table 5.2), two factors namely, Importance and Success factors were found to be significant. While comparing between the Experimental and Control group all the four factors were found to be significant (Table 5.3). The student nurses showed higher attitude towards the Learning factor than the other three factors.

Lumma-Sellenthin (2012) in their study had found that there was a least interest shown by the students from the traditional based curriculum. Whereas, the students exposed to the problem based curriculum had a better attitude towards learning communication skills than the traditional based curriculum students. Nuraini et al. (2015) conducted a
study to sharpen the attitude of the 2nd year student nurses using simulation training method. They had found that there was a significant difference in the attitude among the experimental group student nurses who were exposed to the simulation method.

In contrary, Kutzin (2010) in his study using simulation based education focusing on communication and teamwork among nursing students had observed no difference between the simulation group and the comparison group. Likewise, Steckler (2012) also had found no significant difference in the attitude even after the exposure to the COMFORT curriculum, oncology communication training module. Similarly, El-Demaradash and Gad (2012) had also found no significant difference in attitude towards learning communication skills among the nursing students after the training program. On the other hand, Harlak et al, (2008) had found that the communication skill training program have turned the positive attitude of the students to negative attitude which they think to be negative perception on the source of information.

The student nurses in general do not have a positive attitude towards learning communication skills which may be due to the gap between the theory and practice in the clinical environment (Milige et al., 2015). So it is strongly believed that unless this gap is filled, the preparation of the student nurses remains incomplete. It is only through proper training in communication skills novice or an expert will be potentially prepared to deliver quality care.

Katz (1960) in his functionalist theory of attitude had stated that the attitude helps to achieve their basic needs and goals. He also had stated that only through the attitude a person can gain the understanding and clarity about the topics in question. This theory best supports that the attitude plays a major role in determining our knowledge and so the skill domain. So it is very essential to shape the attitude of the student nurses to learn communication skills effectively through communication skills training program. In the present study, it is found that in the control group there was no significant difference found between the pre and post test whereas, the post test of the student nurses in the Experimental group had gained high score which was apparently due to the communication skills training program conducted for the students.
Section-III - Communication Skills Training Program on Self Perceived Nurse-Patient Communication Skills.

On comparison of the pre test and post test gain scores of the self perceived nurse-patient communication skills within the Experimental group (Table 6.1) it was found that the mean score of post test was highly significant than the mean score of pre test. Similarly, on comparing the gain scores of self perceived nurse patient communication skills between Experimental and Control group, the mean of Experimental group was found to be higher than the mean of Control group (Table 6.3). Whereas, no significant difference was noted within the comparison of pre test and post test gain scores of self perceived nurse patient communication skills in the Control group (Table 6.2). This proves the effectiveness of the communication skills training program.

While comparing the factors of self perceived nurse patient communication skills, significant differences were observed for all the four factors namely IBR, GI, and RGvI and CC in the Experimental group (Table 6.1). Likewise, when comparing the gain scores of factors between the Experimental and Control group also significant differences were observed for three factors namely, IBR, GI, and RGvI factors except CC (Table 6.3). However, in the comparison within the Control group there were no significant differences found for any of the four factors (Table 6.2). It was observed that the student nurses in the present study were very confident in Initiating and building the relationship factor.

Linda, Laura and Beth (2007) in their study found that the student nurses were not found to be confident in communicating with the patient in the clinical settings before the communication skills training program but later after the training program students reported increase in their perceived confidence and competence in exhibiting verbal and non verbal therapeutic communication skills with the patients and also in overcoming the communication barriers. Mullan and Kothe (2010) investigated on the effectiveness of the communication skills training program among the first year student nurses confirmed that there was a significant improvement in the self rated ability in communication skills.

Studies were contributing to the development of the self perceived communication skills among student nurses at different level of their course. The administration of simulation
training programs was widely utilized to improve the attitude towards the communication skills of the students. The results of these studies had proved the effectiveness of the simulation training program in shaping up their self confidence, self ability and in communication competencies (Baxter & Norman 2011; Liaw, Scherpber, Rethans & Klainin-Yobas 2012; Lewis, Strachan & Smith 2012; Quail, Brundage, Spitalnick, Allen & Beilby 2016).

However, the studies carried out among the nurses also had been reported to favor the administration of the communication skills training program to improve the self perceived communication and self efficacy in different setting like oncology hospital (Liu, Mok, Wong, Xue & Xu, 2007), psychiatric setting (Mohamed & Hammed, 2012), medical surgical department in hospital (Shermeh, Amiri, Zarchi, Bahari, & Binesh, 2013), and critical care unit (Milic et al., 2015). The similar result was reported by another study done among the health professionals by Norgaard, Ammentorp, Kyvik, and Kofoed, (2012). This increased self perceived and self efficacy among the staff nurses after the training program was proved to sustain even after 3 months of the training.

In contrary to the above studies, Stecklar, (2012) had found no significant difference in the self perceived communication skills and self efficacy in communication among the student nurses. This result was supported with the similar finding of Cardoza and Hood (2012) among the nursing students. Similarly, the study conducted by Khodadadi, Ebrahimi, Moghaddasian and Babapour (2013) also had reported no significant difference in self perceived communication among staff nurses even after the administration of training program.

Building a sense of self awareness among the student nurses is the need of the hour. In this context with the above results it is clearly evident that though the students are exposed to the clinical settings, as a student nurse they face lot of difficulties which are not addressed most of the time so it is high time that proper preparation of the students about self is important. The present study results revealed that the communication skills training program have made a great change in their self perception towards their communication skills. Since the communication skills training program was effective, proper planning and execution of such training program apart from the regular curriculum is likely to change the nursing care.
Section IV - Communication Skills Training Program on Observed Nurse-Patient Communication.

The comparison of the pre test and post test scores of observed nurse-patient communication skills of Experimental group, showed mean score of post test to be significantly higher than the mean score of pre test (Table 7.1). Hence it is inferred that the communication skills training program was effective in improving the observed nurse-patient communication skills.

Surprisingly even in the Control group the mean of post test was significantly higher than the mean of pre test (Table 7.2). Probably, this may be due to Hawthorne effect, where the participant’s behavior will be modified due to the over consciousness of being observed. In this study, the student nurses would have modified their behavior due to two reasons. First, the conversation with the simulated patient was being video recorded and the second reason was the pretest exposure to the situation and the simulated patient by the student nurse would have created awareness on how to handle the simulated patient. Hence, this experience and awareness would have altered the behavior of the student nurses in the Control group. These may have led to the increase in their nurse-patient communication skills.

Similarly, the comparison of the gain scores of observed nurse-patient communication skills between the Experimental and Control group a significant difference was noted (Table 7.3). The mean score of Experimental group were significantly higher than the Control group.

With the above results, though there was a significant difference within the Control group comparison, the Experimental pre test and post test comparison and the comparison between the gain scores of Experimental and Control group were found to be highly significant than the result of the Control group comparisons. So, it was inferred that the communication skills training program was very effective in improving the observed nurse-patient communication skills of the student nurses.

The comparison of eight domains of the observed nurse-patient communication skills within the Experimental group (Table 7.1) and between the Experimental and Control
group (Table 7.3) gain scores showed significant differences for all the eight domains namely, BR, OD, GI, UPP, SI, RA, PC and MF. Whereas, on comparing the eight domains of observed nurse-patient communication skills between the pre test and post test in Control group (Table 7.2), significant differences were observed for four domains namely BR, GI, SI, and PC. However, the remaining four domains like OD, UPP, RA and MF do not show any significant differences. Among these eight domains the student nurses were found to be skillful in Building relationship (BR) domain.

Mullan and Kothe (2010) in their study among the student nurses had found a significant improvement in the satisfaction towards the nursing course and observed communication skills after the communication skills training program. Likewise, Zavertnik, Huff and Munro (2010) had found that the outcome of a simulation training program for the first year nursing students had exhibited better changes in the communication performance than that of the control group. Additionally, a high significance was noted in the domain of gathering information. Similarly, a study conducted by Baxter and Norman (2011) in analyzing the influence of the simulation training program. The result of the study showed a significant difference in the performance of the students in the observed evaluation and also it was found that they have handled the situation very confidently and gained better skills as a result of the 10 hours of training.

El-Demdashed and Gad (2012) conducted a study among the student nurses, have specifically explored that the training helped the student nurses not only to improve their overall communication skills, but also in empowering their non-verbal communication like body language and verbal communication like questioning, as well building the relationship and better listening skills. Cardoza and Hood (2012) as well as Rethans and Klainin-Yobas (2012) in their study with nursing students had observed a greater significance in the practical communication skills as a result of exposure to the simulation training program.

Studies done among the nurses by Edwards, Peterson, & Davies (2006) had found the influence of the multiple component interventions on therapeutic relationship and communication skills. They had found that there was huge improvement in the listening skills, initiating the conversation, and opening the conversation after the communication
training program. Likewise, in an another study by Ak et al. (2011) had found that there was a great change observed in the respect of the nurses to patient, providing attention to the need of the patient, listening, empathy, giving information skills and in reducing the errors during the nurse patient communication after the communication skills training program.

In another context, Mohamed and Hammed (2012) had found that by administering communication skills training program among the staff nurses in psychiatric setting could reduce the burnout and increase the self esteem. Similarly, Bays et al. (2014) assessed that the experiential communication skills workshop was found to be effective in improving the participant’s practical communication skills among the nurse practitioner students. Likewise, in the study conducted by Younis, Mabrouk, Fawzia, and Kamal (2015), they found the effectiveness of the planned teaching program among the pediatric nurses in the application of therapeutic communication skills. The studies reported elsewhere focused on communication skills of nursing students or nurses to particular groups of patients in oncology setting or in surgical care (Khodadadi, Ebrahimi, Moghaddasian & Babapour, 2013). However, the present module is meant for the student nurses, which is a neglected area of research in the Indian setting.

Nursing being the practical oriented course in handling the sick patient, basic assessment itself remains a great challenge. The basic expected role of the nurse is to assess the patient. In the present study, the students were made to do a basic history collection in other words, gathering the necessary information that remains as a basic for the treatment and care of the patient. So the researcher thought that the communication skill for this basic assessment to be very important and it remains as a strong foundation in developing specific communication skills related to various specialties. Keeping this in view the students were asked to converse with the newly admitted simulated patient. The present study showed certainly great change in the student nurses style of conversation, skills used while conversing with the simulated patient. Thus it is evident that this improvement is achieved possibly through the administration of communication skills training program. Hence it is concluded that the communication skills training program was very effective.
Section-V - Correlation between the Knowledge, Attitude, Self perceived and Observed Nurse-Patient Communication Skills

The correlations between the gain scores of knowledge, attitude, self perceived and observed nurse-patient communication skills were done. The results showed significant positive relationships between the knowledge, attitude and self perceived nurse patient communication skills (Table 8). However, negative correlation was noted between the observed nurse patient communication skills with attitude and self perceived communication skills (Table 8). However, no relationship existed between the knowledge and the observed nurse patient communication skills.

Wright, Bylund, Ware, Parker, Query, and Baile, (2006) have also found a positive correlation between the knowledge and attitude towards communication skills. Parvizi, Jalili, Masoudi, Zareban, & Shahrakipour (2012) explored the knowledge, attitude and performance regarding communication skills of the health care professionals. The correlation result showed a positive correlation between knowledge and attitude, and practice skills.

In contrast, (Zahrani, Misfer, and Hazmi, (2015) found no relationship between the knowledge and practice of communication skills. Similarly, Liaw, Schrpbier, Rethans and Klainin-Yobas (2012) also had found no significant relationship between the knowledge and observed clinical performance among the nursing students.

In the present study, the attitude was found to be positively correlated with self perceived nurse-patient communication skills and this result was contrary to the findings of Wright, Bylund, Ware, Parker, Query, and Baile, (2006) where they found no relationship between the attitude towards communication skills and self confidence in communicating with patients.

Further, self perceived nurse-patient communication skills were found to be negatively correlated with observed nurse-patient communication skills which was supported by the findings of Mullan, and Kothe(2012), in their study they have found that the practical observed communication skills was not significantly correlated with self-rated communication ability of the students. Similarly, Baxter and Norman (2011) and Cardoza and Hood (2012) had found that there was a negative correlation between the self assessment and the observed performance.
Section-VI - Association between the Knowledge, Attitude, Self Perceived Communication Skills and Observed Nurse-Patient Communication Skills with Selected Demographic Variables.

Age
On comparing the study variables between the participants from late adolescents and early adulthood, no significant differences were found. Thus it can be assumed that the age of the participants has no association with knowledge, attitude, self perceived nurse-patient communication skills and observed nurse-patient communication skills (Table-9.1).

Kevin et al. (2006) had explored the attitude of medical students towards communication skills training and knowledge of provider-patient communication. In this study, the authors viewed no differences in the age group with regard to attitude of students towards communication skills training. However, they mentioned that attitude towards communication skills training among students is associated with their perceptions of the importance of the skills and not their age exactly. Those who had positive attitude towards communication skills training had more knowledge about appropriate communication with patients and vice versa (Kevin, et.al, 2006). However one of the studies conducted in Srilanka reported that younger adolescents showed better attitude towards learning communication skills than the adults (Marambe, 2012). Similarly, exploring the relationship between age and attitude towards learning communication skills, Miligi (2015) had viewed limited relationship between age and attitude towards communication skills. The present finding paves a way to think that cultural differences may persist in the attitude towards communication skills in students of different age groups. Thus further exploration is required for better understanding.

Year
The association between the years of study with the study variables was done between three categories by obtaining the gain scores. Firstly, comparing the gain scores of first year Experimental group and Control group, significant association were observed between the three study variables except the attitude towards learning communication skills in Experimental group than in Control group (Table 9.2.1). Secondly, on comparing the gain scores of fourth year Experimental group and Control group, significant association were observed between the three study variables except the attitude
towards learning communication skills in Experimental group than in Control group (Table 9.2.2). Finally, comparison made between the first and fourth year within the Experimental group revealed significant association between three study variables and not with attitude (Table 9.2.3). Furthermore, it was observed that first year students had better knowledge compared to fourth year students (Table -). This could be due to exposure to these skills in the beginning of the course itself which includes departing of theoretical knowledge about all the rules and regulations relating to communication skills. By the time the students come to fourth year they might not give so much importance to these theoretical aspects as they are more into practical exposure towards the clinical setup. Benner (1982), in the very famous Novice to Expert theory proposed that the fourth year nursing students should be expert in exhibiting high level of knowledge, attitude, self perceived and observed communication skills.

Later, experimental studies conducted on other health professionals also noted that students studying in final year of the course had significantly higher scores in communication skills compared those studying in first year of the course (Wright et al., 2009). As the attitude and perceptions of students regarding the importance of learning communication skills actually develop during their coursework and simultaneous role-play, along with their exposure to clinical training among different populations it might be the reason why the communication skills are better among fourth years than first years (Wright et al., 2010). Moreover, as the first years are still in the beginning stage of the course, they deal only with theory aspects of communication skills. Thus, they are still in the stage of acquisition of knowledge and hence there was an increase in the knowledge score among them compared to fourth years. Whereas, fourth year student nurses exhibited better skills in self perceived and observed nurse patient communication (Sadler, 2003). The other reason which might have contributed to the results may be the negligence shown by the fourth year students as they are already exposed to patients practically, they may assume that theory is no more important to be remembered. However, there was no significant change in the attitude between the first year and fourth year students regarding communication skills.

**Domicile**

On analyzing the association between the study variables and the domicile of the participants, no significant differences were observed with any of the study variables.
between participants living in Urban and Rural domicile (Table 9.3). This finding is unique in itself as no studies till date have concentrated in comparing communication skills of nursing students hailing from urban and rural domicile. However, exploring the effectiveness of communication skills training on reducing burn out and improving the self esteem among the nurses hailing from rural and urban domicile revealed that the nurses who hail from rural domicile had good communication skills than the nurses from the urban domicile (Mohamed and Hammed, 2012). Moreover in one of the studies conducted by Pudpong et al., (2017) who tried to compare the attitude of nursing students to work in rural areas revealed that those who have brought up in rural background showed positive attitudes toward working in rural areas after graduation than those who were brought up in urban domicile.

**Religion**

On analyzing the association between the study variables and the religion of the participants, significant differences were observed in attitude level of participants belonging to Hindu, and Christian religion (Table - 9.4). The attitude towards learning communication skills among Christian students were more positive compared to Hindus. However, no such differences were found between knowledge, self perceived nurse-patient communication skills and observed nurse-patient communication skills between participants of different religious groups. These findings are unique in it as no study has concentrated on comparing communication skills of student nurses belonging to different faith orientation. Johnson, Green, and Maben (2014) in their study had found women from Christian community foresee nursing to be the suitable course for them. In the present study the sample of the study was not proportionate to the population further exploration of these findings is suggested.

**Mother tongue**

On comparing the four variables between participants speaking different mother tongue, there was a significant difference observed between the mother tongue and the self perceived nurse patient communication skills (Table-9.5). The Malayalam speakers had high self perceived nurse patient communication skills compared to those who speak Kannada and Tamil. However, Mother tongue doesn’t have any influence over the other variables of knowledge, attitude, and observed nurse-patient communication skills. As the Experimental group and the Control group had more number of participants whose
mother tongue was Malayalam could be one of the reasons for the results. Though, the college is situated in Mysuru, Karnataka state, the students who had Kannada as their mother tongue was very negligible among the four groups. A similar trend was noticed for the Tamil speaking population too. Though the four groups were not matched for mother tongue, all of them had proficiency in English language and hence the mother tongue may not have interacted with the variables under study.

**Type of family**
On comparing the four variables between participants living in different family types, there was a significant difference found between the type of family and the self perceived nurse patient communication skills (Table-9.6). The student nurses who hailed from joint family were found to have significant high score than from those who are from nuclear family in self perceived nurse patient communication skills. However, no significant differences were observed for other study variables among the participants living in nuclear and joint family types. Presently there are no studies that have reported association between communication skills and family type and thus this observation is first of its kind. However, explaining about expressions of feelings and emotions Tiwari and Suryawanshi (2015) reported that in a joint family there would be more number of people who allow the adolescents to explore and express the internal and external changes they experience without any hesitations. This could be the major reason for participants hailing from joint family to score higher for self perceived communication skills.

Other major reason for not having significant association between the family type and knowledge, attitude and observed nurse patient communication skills could be the mismatch of the sample hailing from nuclear and joint family. The maximum number of participants out of the total sample hailed from nuclear family and only 3 of them were from joint family. Thus further exploration of the findings is required in this area after matching the sample size.

**Number of siblings**
On analyzing the association between the four variables and siblings of the participants no significant association were observed between knowledge, attitude, self-perceived and observed nurse-patient communication skills (Table- 9.7). Similar findings were
reported by Gurdogan, Uslusoy, Kurt, and Yasak (2016) who compared the self esteem and communication skills of I year and final year nursing students. In contrary, one of the studies conducted in China by Xie, Ding, Wang, and Liu (2013) attempted to explore the effect of communication skills of a single child. The study revealed that in single child family the child is often pampered since their childhood due to which they develop egocentricism. This dilemma might create a communication barrier between nurse and patient, leading to poor treatment communication ability. This pampering towards only one child in families who have more than a child usually does not take place as parents and other family members are aware of the problems that might occur while treating their children unequally. Moreover in the present era parents encourage all their children equally and share all the privileges among them equally (Afshan and Manickam, 2016). Thus there were no differences observed among participants based on their number of siblings with the study variables.

**Birth Order**

On comparing the four study variables between the participants with different birth orders, no significant differences were observed (Table-9.8) among those who were first born, second born, third born and later born. Though studies have been conducted to explore the effect of birth order on different aspects of behavior and personality (Sulloway 1996; Jefferson, Herbst and Mc Crae 1998; Freese, Powell, and Steellman 1999; Berglund, Eriksson, Westerlund, 2005; Collin 2006) this study has attempted to explore the association between communication skills and birth order among student nurses. However in one of the studies conducted on pharmacy students, Murawski, (1995) reported that the communication of the first born students was not influenced by the birth order, whereas, those who were born later showed poor interpersonal communication skills only in 3 items out of 22 items of the tool. In the present study, the frequency of the sample across birth order was not equal. Moreover those, whose birth order was after third child in the family was nil and therefore it is difficult to interpret the association between birth order and communication skills among nursing students unless detail exploration is made.

**Opting nursing course**

Further analysis of association between the four variables with selection of the course, no significant differences were observed among those who selected nursing course by
themselves, those who were insisted by parents and those who were forced by relatives (Table-9.9). It can be assumed that opting nursing course has no association with knowledge, attitude, self perceived nurse-patient communication skills and observed nurse-patient communication skills of participants.

Majority of the participants in the present study were from Kerala state and only few were from Karnataka. Nursing is considered to be a noble, humble and respectable profession by every Individual and especially people of Kerala give more weightage to this profession as it is considered as non-controversial and service to mankind by them. Thus the selection of the course is not affected by the decision taken by the parents, other family members or whether it is taken by students themselves. Thus opting of nursing course showed no association with knowledge, attitude, self-perceived and observed nurse patient communication skills of participants.

Health worker in family
On analyzing the four variables between participants having health worker in their family with those participants who do not have any health worker in family, no significant differences were observed between the two groups (Table - 9.10). Prior researches viewed that parental occupation plays an important role in building the attitude of their children towards the similar profession (Rees & Sheard, 2002; McKenzie 2013).

Rees and Sheard (2002) from their study on medical students noticed that presence of health worker in the family, leads to positive attitudes towards communication skills in the students. On the other hand, McKenzie (2013) reported that parental occupation moderates the increasing negativity of attitudes towards dental education. This happens due to the experiences of professional life shared by the parents to their children. Listening to the experiences of their parents children build up conservative thoughts due to which they are less likely to view interactions solely from the patient perspective at the beginning of their education. In addition, their perspective of health care communication may be more deep-rooted and thus less resistant to change (McKenzie, 2013).

Chronically ill person in family
On analyzing the association between the four study variables and the presence or absence of chronic ill person in the family of the participants, significant differences were observed in self perceived nurse-patient communication skills of the participants (Table-
9.11). The mean scores of those participants who had person suffering with chronic illness in their family is significantly higher than compared to those who did not have chronic ill people in their family. The student nurses who have chronically ill person in their family would have experienced real picture of their sufferings and could be practically involved in helping in their basic needs. This experience would make an individual to acquire self confidence and courage to understand and handle a patient who is in need. Thus, in the present study this concept would have influenced to have a significant association between the presence of chronically ill patient in the family with the self perceived nurse patient communication skills among the student nurses. However, no such differences were found between the presence or absence of chronically ill patient with knowledge, attitude and observed nurse-patient communication skills of participants.

**Previous exposure to communication training program**

On exploring the association between the study variables with previous exposure to the communication skills training program, no significant differences were observed in knowledge, attitude, self perceived and observed nurse-patient communication skills of the participants (Table–9.12). However, similar result was obtained by Bylund et al (2017) who had conducted a study on effectiveness of culturally tailored communication skills training course among physicians. They had found that, though the participants had undergone prior training on communication there was no significant difference observed between them and those who have not attended any previous training program. Thus it was inferred that there was no association between the previous exposure to communication skills training program with knowledge, attitude, self-perceived and observed nurse patient communication skills.

**Conclusion:**

The present study variables like knowledge, attitude, self perceived and observed nurse patient communication skills were found to be significantly higher in Experimental group than the Control group student nurses. These findings remain as an evident for the effectiveness of communication skills training program.