

Attitudes and Behaviors of Nursing Students towards Caring Nurse-Patient Interaction

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BACKGROUND/AIMS

This study aimed to determine the attitudes and behaviors of nursing students towards caring nurse-patient interactions.

MATERIAL and METHODS

A total of 177 nursing students, who were enrolled at the undergraduate nursing program of Eastern Mediterranean University in Northern Cyprus in the spring semester of academic year 2018-2019, constituted the sample of this descriptive study. A "Personal Information Form" and "Caring Nurse-Patient Interactions Scale" were used for data collection.

RESULTS

Attitudes and behaviors of nursing students towards caring nurse-patient interactions were positive. Scores obtained regarding the importance aspect of caring nurse-patient interactions were significantly higher than the scores for the competence and realistic aspects. The competence scores of the participants who chose to study nursing because they loved the profession and the importance scores of the participants who had healthcare experience as patients were significantly higher than those of the participants without healthcare experience as patients

CONCLUSION

Our findings suggest that nursing students recognize the importance of caring nurse-patient interactions. However, many do not consider themselves as competent in those interactions and they do not necessarily believe that caring nurse-patient interactions are realistic.

Keywords: Caring, nurse-patient interaction, nursing students

INTRODUCTION

Nursing is a profession that entails important responsibilities related to patient care and health (I-3). Given nurses are primarily concerned with patients, effective interaction and interpersonal communication skills are important. While providing healthcare services, nurses are continuously interacting with patients (4). Caring moments refers to those moments when nurses meet with patients to care for them (5). Since patient needs are the focus of patient-nurse communication, the communication should be patient-centered. The main aim of patient-centered communication is to identify patient needs and plan nursing interventions according to those needs (4, 6).

The "theory of human caring", which was proposed by Watson, focuses on a natural, reliable, compassionate, and sensitive relationship between nurses and patients (7). A "transpersonal caring relationship" is one of the main concepts of the model proposed by Watson (8). Mutual interaction between the patient and the nurse during caregiving is beneficial for the patient. A transpersonal caring relationship is believed to have a healing quality in physical and emotional terms (9,10). The therapeutic relationship is fundamental to the process of high-quality nurse-patient interactions. As part of the therapeutic relationship, nurses identify patient needs, implement the interventions, and speed up the recovery period. During this relationship, nurses should be trustworthy, helpful, and sensitive to patient needs (II). Factors such as the time needed for institutional procedures, maintaining patient records, and reduced availability of nurses can decrease the time allocated to nurse-patient interactions. A study by Bridges et al. (12) found that the quality of nurse-patient interactions decreased in parallel with the decrease in the number of available nurses.

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Most studies that have analyzed the attitudes and behaviors of nurses and nursing students towards caring nurse-patient interactions are based on Watson's theory of human caring (13-15). A study by Kaçmaz and Çam (14) on psychiatric nurses found that the participants scored high on importance aspect, competence aspects and feasibility acpects of the Caring Nurse-Patient Interaction Scale (CNPIS). A study by Bayraktar and Eşer (15) on nurses who worked at a university hospital found that attitudes and behaviors of the participants towards caring nurse-patient interactions were positive. Similarly, studies by Erzincanlı and Yüksel (6) and Yılmaz and Gökdere Çınar (16) found that nursing students had positive attitudes and behaviors towards caring nurse-patient interactions. A study by Nwosu et al (10) found that cordial nurse-patient relationships had a positive impact on patient outcomes. Finally, Lotfi et al. (17) found that most participant patients were dissatisfied with their nursing care, and their dissatisfaction was primarily caused by poor nurse-patient communication.

Nurse-patient interactions constitute the core of a caring relationship. Caring behaviors at the heart of caring relationships should be developed during nursing education. Although nursing education is comprehensive, it is based on the concept of care (18). While developing caring behaviors, communication skills of the nursing students should be improved (19). To this end, the researchers should identify the importance given by nursing students to holistic care, as well as their perceived competence levels in terms of caring nurse-patient interactions and their opinions on the extent to which caring is realistic in nurse-patient interactions. In this way we could attempt to improve nurse-patient interactions among the nursing students and produce information on ways to improve patient care. Within this context, this study aimed to identify the attitudes and behaviors of nursing students towards caring nurse-patient interactions. The research questions included the followings:

I. What are the attitudes and behaviors of nursing students towards caring nurse-patient interactions?

Main Points:

- Nurse-patient interactions constitute the core of a caring relationship.
- Caring behaviors at the heart of caring relationships should be developed during nursing education.
- Attitudes and behaviors of the nursing students towards the importance aspect of the CNPIS were more positive than those regarding the competence and the realistic aspects.
- The curriculum of undergraduate nursing education should include the development of qualifications and skills in nurse-patient interactions.
- Interventions on the implementation of healthcare should be planned in the curriculum of undergraduate nursing education.

2. Is there a difference between descriptive characteristics of the nursing students and their attitudes and behaviors towards caring nurse-patient interactions?

MATERIAL AND METHODS

This descriptive study was conducted with 2nd, 3rd, and 4th year undergraduate students who were studying at the nursing department of the Faculty of Health Sciences of a foundation university located in the Turkish Republic of Northern Cyprus. We excluded first-year students because they had not yet received the basic nursing education courses and did not participate in clinical practice. Some 227 students who were enrolled at the undergraduate nursing program in the spring semester of academic year 2018-2019 were eligible for the study. Three students who refused to participate and 47 students who were absent during the time of data collection did not take part in the study; thus, 177 (78% of the eligible students) who agreed to participate to the study and who were enrolled at the program during the data collection period constituted the final sample.

Data Collection:

Data was collected in the class environment between May 16 and 30, 2019. The students were informed regarding the aim and scope of the research and their written consent was obtained before data collection. Next, we distributed questionnaires to be completed by the participants and returned in the same environment. We used the "Personal Information Form" and CNPIS for data collection

Personal Information Form

A personal information form was prepared by the researchers by using relevant literature (14-16). The form consisted of II questions on the sociodemographic characteristics of the participants, including age, sex, class year, and the reasons they chose to study nursing.

Caring Nurse-Patient Interactions Scale (CNPIS)

The Caring Nurse-Patient Interactions Scale (CNPIS), which was based on Watson's theory of human care, was developed by Cossette et al. (20) to evaluate the attitudes and behaviors of nurses towards care. The validity and reliability of the Turkish version of the scale has been assessed by Atar and Aştı (21), who found that Cronbach's alphas for the importance, competence, and reality aspects of the Turkish version were 0.99, 0.98, and 0.99, respectively. The CNPIS consists of 70 items asking nurses about the extent to which caring nurse-patient interactions are important, competent, and realistic by using a 5-point Likert type scale ranging from never (I) to extremely/always (5) (2). The CNPIS has IO sub-scales, including humanism, hope, sensitivity, helping relationship, expression of emotions, problem solving, teaching, environment, needs, and spirituality. The subscales for each aspect did not change and the scores on the scales for each aspect ranged between 70 and 350, with higher scores indicating more positive attitudes and behaviors towards caring nurse-patient interactions. In our study, Cronbach's alphas for the importance, competence and realistic aspects of the CNPIS were 0.988, 0.987 and 0.987, respectively.

Statistical Analysis

The data were analyzed using Statistical Package for the Social Sciences 20.0 version (IBM Corp.; Armonk, NY, USA) software. The One-Sample Kolmogorov-Smirnov test and Shapiro-Wilk test were used for normality of the distribution of numerical variables. Given the analysis revealed that the data were not normally distributed, we used a non-parametric Friedman test. The sociodemographic characteristics of the participants were analyzed using a frequency analysis. The Mann-Whitney U and Kruskal-Wallis H tests were used to compare the scores on the importance, competence, and realistic aspects of the CNPIS with the sociodemographic variables. Correlations between the three aspects of the CN-PIS were analyzed by using the Spearman Rho Correlation Coefficient test.

Ethical Considerations

We obtained institutional permission from the chair of the Department of Nursing and ethics permission from the scientific research and publication ethics committee (Decision No. 2019/14-07). Participants were informed about the study and their written voluntary informed consent was obtained.

RESULTS

A total of 48% of the participants were between the ages of 21 and 22 and 66.1% were women. Some 42.37% of the participants were 2nd years students and 71% participated in a clinical practice of medical and surgical nursing course. Some 54.8% of the participants stated that they studied nursing because they loved the profession. The percentages of participants who had no difficulty communicating with the patients and their family members were 88.7% and 90.4%, respectively. Some 77.4% of the participants had healthcare experience as patients, and 52.54% of the nursing students participated in social events.

Scores obtained by the students regarding the importance aspect of the overall CNPIS and its subscales were significantly higher than those obtained for the competence and realistic aspects (p<0.05). The scores on the importance, competence, and reality aspects were highest for the "needs" subscale of the CNPIS (Table I).

There was no statistically significant difference between the scores obtained from the importance, competence, and realistic aspects of the CNPIS and the characteristics of the participants, including age, sex, class, clinical practice, difficulties in relating with patients, difficulties in social relations, and participation in social events (p>0.05) (Table 2).

There was no statistically significant difference between the scores obtained on the importance and realistic aspects of the CNPIS and the reasons for choosing to study nursing (p>0.05). However, we did find a positive correlation between the scores obtained from the competence aspect of the scale and the reason for choosing to study nursing (p<0.05). The competence scores of the participants who chose to study nursing because they loved the profession (=300.15±39.26) were higher than the participants who chose to study nursing because of job availability concerns (=279.97±53.94) (Table 2).

In terms of those with previous healthcare experience as patients, we found a statistically significant difference between the scores obtained on the importance aspect of the CNPIS (p<0.05), whereas there was no statistically significant difference between the scores obtained on the competence and realistic aspects (p>0.05). The scores on the importance of caring nurse-patient interactions among the participants who had previous healthcare experience as patient (=310,24±45.09) were higher than those of the participants without healthcare experience as patients (=307.22±44.28) (Table 2).

Subscales	Caring				
	Importance M±SD	Competence M±SD	Realistic M±SD	p	Difference°
Humanism	26.83±4.6l	25.29±4.39	25.37±4.8	0.000**	I-C, I-R
Норе	27.33±3.7	25.23±4.52	25.I5±5	0.000**	I-C, I-R
Sensitivity	26.62±3.9I	24.63±4.63	24.32±5.29	0.000**	I-C, I-R
Helping relationship	3I.5I±5.23	29.95±5.91	29.92±5.87	0.000**	I-C, I-R
Expression of emotions	26.89±4.7	25.l±4.65	25.02±4.35	0.000**	I-C, I-R
Problem solving	26.59±4.5	24.83±4.73	24.49±4.95	0.000**	I-C, I-R
Teaching	40.18±6.64	38.03±7.19	37.87±7.38	0.000**	I-C, I-R
Environment	3I.34±5.3I	29.89±5.37	29.85±5.56	0.000**	I-C, I-R
Needs	45.36±6.9	42.73±7.08	42.39±8.42	0.000**	I-C, I-R
Spirituality	26.92±4.43	25.46±4.49	25.73±5.05	0.000**	I-C, I-R
CNPIS	309.56±44.28	291.15±46.83	290.l2±50.04	0.000**	I-C, I-R

TABLE 2. Comparison of the demographic	c characteristics of the	participants wi	th the caring nurse-po	itient interactio	ns scale scores (n=17	77)
	Importance Competence		Competence	Realistic		
Variables	x ±s	р	- x±s	р	x±s	р
Age						
19-20 years	312.37±35.02	0.148	294.74±37.66	0.943	300.05±37.23	0.566
2I-22 years	310.35±51.76		289.52±53.63		287.74±55.07	
23 years and above	306.35±37.3		291.19±41.49		286.89±49.49	
Gender						
Female	307.85±48.85	0.799	291.3±50.04	0.447	288.78±51.36	0.863
Male	312.92±33.77		290.85±40.24		292.75±47.67	
Sınıf						
2^{nd}	312.24±41.39	0.676	296.28±41.23	0.210	293.l2±45.07	0.280
3 rd	306.96±39.36		281.92±48.65		278.73±57.68	
4 th	308.24±52.88		292.82±52.04		297.I2±47.8	
Clinical Practice						
Surgical disease nursing	3I5.63±33.34	0.400	306.3l±34.l	0.076	304±36.4I	0.177
Pediatric nursing	303.74±40.I5		277.26±49.79		274.5±60.17	
Community health nursing	308.9I±54.62		293.6l±5l.35		298.84±43.92	
Medical and surgery nursing	3I2.38±42.23		295.2±43.04		291.72±47.37	
Reasons for choosing to study nursing						
Job security	304.19±52.51	0.112	279.97±53.94	0.046*	282.46±59.59	0.560
Loves nursing	3I5.63±37.5		300.I5±39.27		296.67±40.94	
Family demand	292±39.34		281.54±48.76		280.77±54.9I	
Difficulties relating with the patients						
Yes	306.4±40.97	0.573	283.2±50.23	0.403	279.9±59.77	0.448
No	309.97±44.79		292.l6±46.46		291.43±48.73	
Difficulties in social relations						
Yes	292.7l±42.9l	0.131	274.65±50.26	0.087	266±67.43	0.115
No	3II.36±44.I7		292.9±46.28		292.69±47.38	
Healthcare experience as a patient						
Yes	310.25±45.1	0.040*	292.44±46.8I	0.334	291.55±49.37	0.383
No	307.23±4I.8I		286.73±47.23		285.23±52.62	
Participation in Social Events						
Yes	308.76±46.04	0.726	290.26±47.85	0.857	294.6±49.5	0.186
No	3I0.45±42.5		292.I3±45.95		285.I7±50.46	

		CNPIS		
		Importance	Competence	Realistic
CNPIS (Importance)	r	1		
	р			
CNPIS (Competence)	r	0.705	1	
	р	0.000*		
CNPIS (Realistic)	r	0.694	0.754	1

Finally, the analysis of the correlation between the scores obtained from the importance, competence, and realistic aspects of the CNPIS revealed a strong, positive, and statistically significant correlation between the three aspects (Table 3).

DISCUSSION

Care services constitute the basis of the nursing profession. For this reason, students who are candidates for the nursing profession should receive sufficient knowledge and acquire the necessary skills to provide high-quality healthcare services to patients. Acquiring the necessary caring behaviors is among the basic aims of nursing education. In our study, the mean scores obtained by the participant nursing students on the importance, competence, and realistic aspects of the CN-PIS were high. The attitudes and behaviors of the participants towards the importance of caring nurse-patient interactions were more positive than those towards the competence and realistic aspects. Similar to our study, two other studies on Turkish nursing students found that the students considered caring nurse-patient interactions important, but they did not consider themselves as competent in such interactions and did not believe that caring nurse-patient interactions were realistic (6, 22). A study of Kaçmaz and Çam on psychiatric nurses also found that the scores obtained by the nurses on the importance aspect of caring nurse-patient interactions were higher (14). Based on these findings, we suggest that nursing students have a more positive attitude towards the importance aspect of caring nurse-patient interaction than towards the competence or realistic aspects. Although the nursing students believed in the importance of caring, they found it difficult to apply this information in practice due to perceived incompetence while interacting with the patient during the delivery of healthcare services. In addition, our findings could be due to the fact that the students were still in the process of learning, so they could not yet use the affective and psychomotor skills in practice (23).

Regarding the importance, competence, and realistic aspects of the CNPIS, the participants obtained the highest scores on the "needs" subscale. Studies by Erzincanlı and Yüksel (6), and Yılmaz and Gökdere Çınar (16) on nursing students also found that the highest scores were obtained from the "needs" subscale of the CNPIS. Based on this finding, we can conclude that the nursing students were sensitive to the physical, emotional, and spiritual needs of the patients to whom they provided healthcare. The sensitivity of the nursing students to the needs of the patients might be related to the fact that nearly half of the participants were sophomore students participating in clinical practice in addition to the classes on medicine and nursing. During clinical practice, the participants probably had a chance to interact with the patients and use their theoretical knowledge in line with their patients' needs. In addition, this finding could also be related to the supportive measures taken by the nursing educators to develop the healthcare behaviors and skills of the nursing students during their clinical practice.

We found that age, sex, and class year of the participants had no impact on their CNPIS scores. Some other studies on nursing students also found that age had no impact on CNPIS scores (6, I6, 22). Regarding the sex aspect, the study by Erzincanlı and Yüksel (6) found that the women scored higher than men on the importance aspect, whereas two other studies found no impact of sex on CNPIS scores (I6, I9). The differences in these findings could be related to differences in the sociocultural structures of the samples.

Choosing the nursing profession is a turning point in the life of an individual, with important repercussions on social relations (24). We found that the CNPIS scores obtained on the competence aspect were higher for the participants who chose to study nursing because they loved the profession of nursing, compared with the participants who chose it for job safety. Similar to our findings, another study on nursing students found that the CNPIS scores of the students who chose to study nursing because they loved the profession were higher than those who chose it for job safety (22). Yet another study on nursing students found no statistically significant difference between the reasons for choosing the profession and CNPIS scores (16). According to our findings, choosing to study nursing due to loving the profession led the participants to feel more competent in caring nurse-patient interactions than those who chose the profession for other reasons. As such, we might expect that these students would deliver high-quality healthcare services and contribute to the development of the profession in the future. We believe that nursing students who chose the profession since they loved it might be more successful, leading them to believe themselves more competent in healthcare delivery than those who chose the profession for other reasons.

Having healthcare experience as patients might help nursing students develop their empathy skills. In addition, previous experience as patients might help students understand how patients feel and assess healthcare services from the patients' point of view (25). In our study, we found that nursing students with prior healthcare experience as patients obtained higher scores on the importance aspect of the CNPIS compared to the participants without such experience. The study by Kalender et al. (26) found that the nursing students with previous healthcare experience as patients were more sensitive, humanistic, and that they gave more hope to the patients for whom they cared. The study by Birimoğlu and Ayaz (23) on the perception of caring behaviors of the nursing students found that previous healthcare experience as patients had a positive impact on their caring behaviors. In this sense, our findings are consistent with those of the liter-

Our study found a strong, positive, and statistically meaningful correlation between the importance, competence, and realistic aspects of the CNPIS. The study by Yılmaz and Gökdere Çınar (16) also found a positive and statistically meaningful relationship between the total scores obtained on the importance, competence and realistic aspects of the CNPIS.

The study by Kaçmaz and Çam (14) on psychiatric nurses found a positive and strong correlation between the scores obtained on the importance and competence aspects. Nurses and nursing students might feel more competent if they understand the importance of caring nurse-patient interactions and might apply this understanding while providing healthcare services. Thus, during the patient-nurse interactions, nurses should understand the importance of healthcare, believe in their competence, and prepare to use their competence in practice.

We found that attitudes and behaviors of the participants towards caring nurse-patient interactions were positive. Attitudes and behaviors of the nursing students towards the importance aspect of the CNPIS were more positive than those regarding the competence and the realistic aspects. In addition, the participants obtained the highest scores on the "needs" subscale of the CNPIS. Finally, we found that the competency scores of the participants who chose to study nursing because they loved it and the importance scores of the participants who had previous healthcare experience as patients were significantly higher than the other scores. Based on these findings, we suggest that the curriculum of undergraduate nursing education should include the development of qualifications and skills in nurse-patient interactions. Interventions on the implementation of healthcare should be planned in the curriculum of undergraduate nursing education. Students who love the profession of nursing should be especially encouraged, given those who love the profession believe more in their competence than students who have chosen the profession for other reasons.

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REFERENCES

Kılıç HF, Cevheroğlu S, Görgülü S. Determination of care dependency level of patients staying in medical and surgical clinics. DEUH-FED 2017; 10(1): 22-8.

- Temel M, Bilgiç Ş, Çelikkalp Ü. Effective factors in the career choice of nursing students. J Higher Edu Sci 2018; 8(3): 480-7. [CrossRef]
- Bölükbaş N. Occupational selection of nursing students and the effecting factors. Ordu University Journal of Nursing Studies 2018; I(1): 10-7
- Korkmaz M, Tuna Hİ. The nurse-patient communication in critical care units. International Refereed Academic Journal of Sports, Health and Medical Sciences 2014; II(4): 14.
- Özgürsoy Uran BN, Özer S, Yıldırım Y. An example of Watson's theory of human caring model: Case of heart failure. Turk J Card Nur 2015; 6(11): 183–98. [CrossRef]
- Erzincanlı S, Yüksel A. Analysis of attitudes and behaviors of nursing students towards care-focused nurse-patient interaction in terms of some variables. Journal of Anatolia Nursing and Health Sciences 2018; 21(1): 10-7.
- Erbay Ö, Yıldırım Y, Fadıloğlu Ç, Aykar FŞ. use of watson's theory of human caring in nursing care of patients with hypertensive attack: Case report. Turk J Cardiovasc Nurs 2018; 9(19): 82-8. [CrossRef]
- Arslan-Özkan İ, Okumuş H. A model where caring and healing meets: Watson's theory of human caring. Hemşirelikte Araştırma Geliştirme Dergisi 2012; 2: 61-72.
- Arslan Özkan H, Bilgin Z. Nursing philosophical essence improvement and healing treatment methods. HSP 2016; 3(3): 191-200.
 [CrossRef]
- Nwosu J, Vincent Inyama V, Emeka C. Effect of nurse-patient relationship on patients recovery at NKST hospital Mkar, Gboko, Benue State. Afr J Nurs Midwifery 2017; 5(2): 695-703.
- II. Fortuno AF, Oco BD, Clores MA. Influential components of caring nurse-patient interaction (cnpi) in a tertiary hospital in the Philippines: Towards improving health outcomes of patients. Int J Nurs Sci 2017; 7(4): 84-90.
- Bridges J, Griffiths P,Oliver E, Pickering RM. Hospital nurse staffing and staff– interactions: an observational study. BMJ Qual Saf 2019; 28(9): 706-13. [CrossRef]
- 13. Arli SK, Bakan AB, Öztürk S, Erisik E, Yıldırım Z. Critical thinking and caring in nursing students. Int J Caring Sci 2017;10 (1): 471-8.
- Kaçmaz ED, Çam MO. Review of caring nurse-patient interaction for nurses caring for psychiatric patients. J Psychiatric Nurs 2019; 10(1): 65-74.
- Bayraktar D, Eşer İ. Attitudes and Behaviors of Nurses Towards Caring Nurse-Patient Interaction. Journal of Anatolia Nursing and Health Sciences 2017; 20: 3: 188-94.
- Yılmaz D, Gökdere Çinar H. Examination of attitudes of nursing department senior students towards caring nurse-patient interaction. JHS 2017; I4(4): 3300-9. [CrossRef]
- Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nurse-patient communication and patient satisfaction from nursing care. Nursing Open 2019; 6(3): II89-96. [CrossRef]
- Türk G, Adana F, Erol F, Çevik RA, Taşkıran N. The reasons for choosing the career of the nursing students and their perceptions of care behaviours. Gumushane University Journal of Health Science 2018; 7(3): 1-10.
- Erigüç G, Şener T, Eriş H. Evaluation of communication skills: A vocational high school students sample. Hacettepe Journal of Health Administration 2013;16(1): 45-65.
- 20. Cossette S, Caraa C, Ricarda N, Pepin J. Assessing nurse-patient interactions from a caring perspective: report of the development and preliminary psychometric testing of the caring nurse-patient Interactions scale. IJNS 2005; 42(6): 673-86. [CrossRef]
- Atar NY, Aştı TA. Validity and Reliability of Turkish Version of the Caring Nurse-Patient Interaction Scale. FNJN 2012; 20(2): 129-39.
- 22. Zaybak A, İsmailoğlu EG, Efteli E. Attitudes and behaviors of nursing students towards caring nurse-patient interaction. Uluslararası Hakemli Hemşirelik Araştırmaları Dergisi 2014; 1(2): 24-34. [CrossRef]

- Birimoğlu C, Ayaz S. Nursing students' perceptions of caring behaviors. Journal of Hacettepe University Faculty of Nursing 2015; 40-8
- 24. Özdelikara A, Ağaçdiken S, Aydın E. Career choices of nursing students and influencing factors. Acibadem University Health Sciences Journal 2016; (2):83–8.
- 25. Ter Beest H, van Bemmel M, Adriaansen M. Nursing student as patient: experiential learning in a hospital simulation to improve empathy of nursing students. Scand J Caring Sci 2018; 32(4): 1390-1397. [CrossRef]
- 26. Kalender N, Tosun N, Çınar Fİ, Bağçivan G, Yaşar Z. Assessing the attitudes and behaviors of nursing students according to Caring Nurse-Patient Interaction scale. Gülhane Medical Journal 2016; 58: 277-281. [CrossRef]