

Nurse-Physician attitudes towards collaboration and shared education

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Abstract: The study aims to investigate attitudinal differences towards physician-nurse collaboration and shared education of 120 health workers including physicians (n=30), nurses (n=30), medical students (n=30) and nursing students (n=30). Participants responded to a short survey and to the Jeffersonian Attitudes Scale for Doctor-Nurse Collaboration (Hojat, 2012). Results yielded that 73.33% of physicians, 90% of nurses, 90% of nursing students and 96.67% of medical students showed positive attitudes towards teamwork and shared education. Medical students and physicians showed the highest positive attitudes towards nurse's autonomy. Nursing students showed the highest negative attitudes towards physician's dominance. There were not significant differences between the groups in the other factors. Results point out the importance of developing healthcare skills through the improvement of educational programs in term of collaboration.

Keywords. Attitude, collaboration, nurse, physician, shared education.

الملخص. هدفت الدراسة إلى التحقيق في الاختلافات في المواقف تجاه التعاون بين الطبيب والممرض والتعليم المشترك لـ 120 من العاملين الصحيين بما في ذلك الأطباء (العدد = 30) والممرضين (العدد = 30) وطلاب الطب (العدد = 30) وطلاب علوم التمريض (العدد = 30). أجاب المشاركون على استطلاع قصير وعلى مقياس جيفرسونيان لتعاون الأطباء والممرضين (2012). أظهرت النتائج أن 73.33% من الأطباء و 90% من الممرضين و 90% من طلاب علوم التمريض و 96.67% من طلاب الطب أظهروا إيجابية تجاه العمل الجماعي والتعليم المشترك. أظهر طلاب الطب والأطباء أعلى المواقف الإيجابية تجاه استقلالية الممرض. أظهر طلاب التمريض أعلى المواقف السلبية تجاه هيمنة الطبيب. لم تكن هناك فروق ذات دلالة إحصائية بين المجموعات في العوامل الأخرى. تشير نتائج هذه الدراسة إلى أهمية تنمية مهارات الرعاية الصحية ، من خلال تحسين البرامج التعليمية من حيث التعاون المهني. الكلمات المفتاحية. المواقف ، التعاون ، الممرض ، الطبيب، التعليم المشترك.

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1. Introduction

Professional relationship between nurses and physicians has undergone a real shift from “hierarchical relationship” to “partnership relationship”. Over time, hierarchical model imposed radical authority over nurses and allowed them limited autonomy. A complementary model was established promoting nurse–physician collaboration. This new model would allow the two main health actors to participate together in decision–making and sharing responsibilities. Nurse–physician relationship, until today, represents one of the fundamental factors for improving the quality of health care. Team approach becomes increasingly prevalent in healthcare organizations and one of the hallmarks of inter–professional effectiveness (Heinermarm, 2002).

Collaborate is derived from the Latin “collaborare” meaning “to work together” and is considered to be a process of shared creation, a process by which a group of entities enhance each other's capabilities. This would involve sharing of risks, resources, responsibilities and rewards (Camarinha–Matos & Afsarmanesh, 2008). It is necessary to define what is not implied in the term "collaboration". The collaboration does not involve supervision, or one–way or two–way information exchange. Effective professional collaboration requires mutual respect and trust (Kramer & Schmalenberg, 2003). According to Deutsch (1982) collaboration is a social behavior and for it to be successful, certain criteria must be considered including; the actors who have agreed to collaborate, the common goal and the basic requirements or preconditions for collaboration (Brna, 1998; Giesen, 2002). With the common goal of healing patients, collaboration between nurse and physician creates a ground of harmony optimizing patient's future. Collaborative practice in the healthcare sector has been defined in several ways. Weiss and Davis (1985) offered a useful definition that supports the theoretical framework of our study. They defined collaborative practice as the interactions between nurse and physician that allow the knowledge and skills of these two professionals to synergistically influence patient care. Collaboration between nurse and physician would also mean cooperation in work, sharing responsibilities in order to solve problems and to formulate and execute action plans for patient care (Boey & Xia, 2015).

Collaboration decreases competitiveness (individualism) and increases efficiency and this further improves the level of personal and group accomplishment (Blumberg, 1994). In fact, studies have been able to show that healthcare teams that deploy collaborative, rather than competitive approach are more productive and efficient. This is the result of better communication between the different actors in the group and a greater effort to strengthen teamwork (Davis, 1969). Welp et al (2016) were able to demonstrate that nurses and physicians who were not satisfied with the quality of teamwork in their unit experienced high rates of emotional exhaustion. The authors stress that this should be taken into consideration, especially since emotional exhaustion has been associated with patient safety indicators such as errors and adverse events (Welp et al, 2016). In this context and among most recent studies that have dealt with the subject, Mulidan et al (2019) identified the influence of joint training programs (workshops) related to strengthening professional physicians–nurses collaboration in enhancing patient safety in the General Haji Adam Malik Hospital, Medan, Indonesia. Forty–four nurses and forty–four physicians participated in the study. It was concluded that joint seminars had a real influence of nurse–physician professional collaboration and role–plays on the goal of patient safety. The authors strongly recommended, as a strategy for strengthening collaboration, that hospital directors organize regular joint seminars and related to the practice of professional collaboration (Mulidan et al, 2019).

Studies show that nurses who work in collaboration with physicians experience less burnout and that recruitment and retention rates are higher than those who work in non–collaborative environments (Aiken, Clarke, Sloane, Sochalski and Weber, 1999; Buchan, 1999). Other studies have been established with the aim of care innovation and with a primary objective of identifying the real attitudes and perceptions of physicians and nurses towards collaboration and its degree of success on the real level and convenient. The benefits of positive nurse–physicians relationships are well documented in the literature. Although in recent years inter–professional relationships between health partners have gained attention, few studies on physician / nurse collaboration have been conducted in Arab countries. Focus is essential. The study by Elous et al (2017) is one of the most recent studies examining the attitudes of physicians and nurses towards nurse–

physician collaboration. The study by Elous et al (2017) was conducted among forty-four physicians and nurses at two main public referral hospitals in the Gaza Strip, Palestine. The study was able to show that nurses expressed more positive attitudes towards collaboration than physicians and that work experience had a strong correlation with attitudes towards collaboration.

In Tunisia, very limited amount of scientific research dealing with the subject of nurse-physician collaboration with shared education and teamwork were established. Therefore, the objective of our research is to conduct a descriptive and comparative portrait of nurses, physicians, nursing students and medical students' attitudes towards nurse-physician collaboration and shared education.

2. Method and Tools.

2.1. Participants:

Our study involved 120 participants, aged between 22 and 45, including 62 women and 58 men. Our research sample is divided into four groups; the first group is made up of 30 physicians (13 female and 17 male), the second group is made up of 30 nurses (16 female and 14 male). The participants of the two groups work in various services including emergencies, internal medicine, resuscitation, endocrinology, nephrology and gynecology. The third group is made up of 30 medical students. The fourth group is made up of 30 nursing students (14 female and 16 male).

3. Measures:

A preliminary short survey was developed based on the literature review while taking into account the Tunisian context. The survey contains 4 items; (1) necessity of training on professional collaboration, (2) healthcare actors in need of training, (3) training timelines (3) training modalities. A survey pre-test was carried out, and allowed to ensure the clarity of items understanding and to make the necessary modifications before final version distribution. This pre-test did not reveal any changes.

Also, The Jefferson Scale of Attitudes towards Physician-Nurse Collaboration (JSATPNC) was used. JSATPNC is an instrument established to measure the attitudes of nurses and physicians towards physician-nurse collaboration. Built in 1985, the original scale contained 20 items, modified in 1997, then in 1999, so that in 2012 it

resulted in a final version of 15 items with confirmed and proven validity and reliability (Hojat, 2012). Therefore, the final version of JSAPNC, is 15 items answered on 4 points Likert-type scale (4 = strongly agree, 3 = Agree, 2 = Disagree, 1 = strongly disagree) (Hojat, 2012). The Jefferson Attitudes toward Doctor-Nurse Collaboration Scale assesses four domains:

- The field "team / shared education and teamwork": items 1, 3, 6, 9, 12, 14 and 15.
- The field "care versus cure": items 2, 4 and 7.
- The field of "nurse's autonomy": items 5, 11 and 13.
- The "physician dominance": items 8 and 10.

4. Procedures:

The study was conducted in compliance with the ethical rules of research. Approval from the Research Projects Committee of The Higher Institute of Nursing Sciences of Tunis was obtained. Data collection period started from the end of January until the beginning of March 2020.

The assessments delivery session was individualized and prescriptive. We chose the direct administration technique. The respondent had to complete the assessments himself. The questionnaire is hand-delivered by the responsible researcher and all necessary explanations are provided. Each participant was asked to answer to the questionnaires and express free and informed consent. Before each test, we made sure to explain the purpose and nature of our study. Participants were invited to answer all questions freely. We also explained them that this study was part of academic research related to the end study in nursing sciences. The guarantee of anonymity and confidentiality was also shared and explained.

7. Statistical Procedures:

The IBM Statistical software SPSS Statistics 21.0 was used for the data analysis. Descriptive statistics (mean and standard deviation) were presented. The Independent Samples t -test was used to compare the mean attitudes and scores of physicians, nurses, medical students and nursing students. For all statistical analyses, $p \leq 0.05$ was adopted as the significance level and NS corresponded to no significance.

3. Results and Discussion

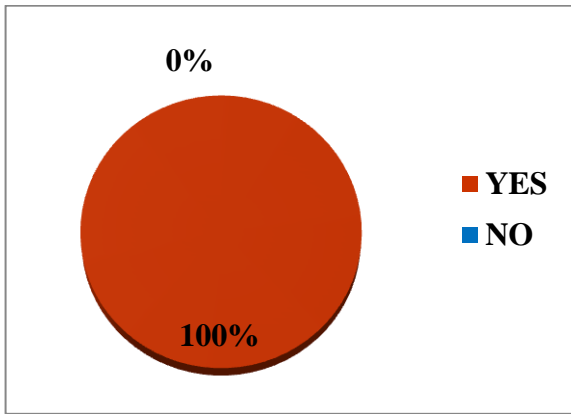


Figure (1): Percentage of participants' responses related to the necessity of training in term of professional collaboration.

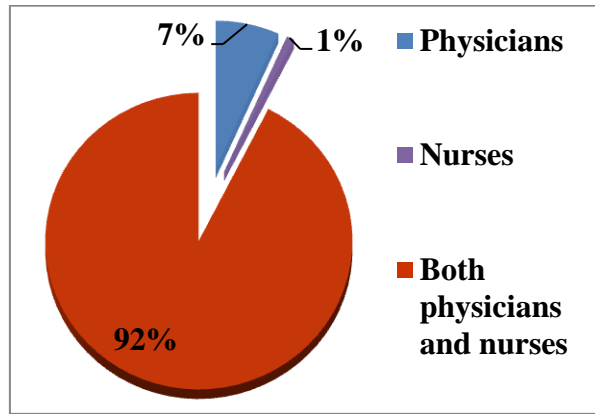


Figure (2): Percentage of participants' responses related to of healthcare actors in need of training.

100 % of participants reported shared education in professional collaboration is necessary and 92% of them consider that it should concern both physicians and nurses.

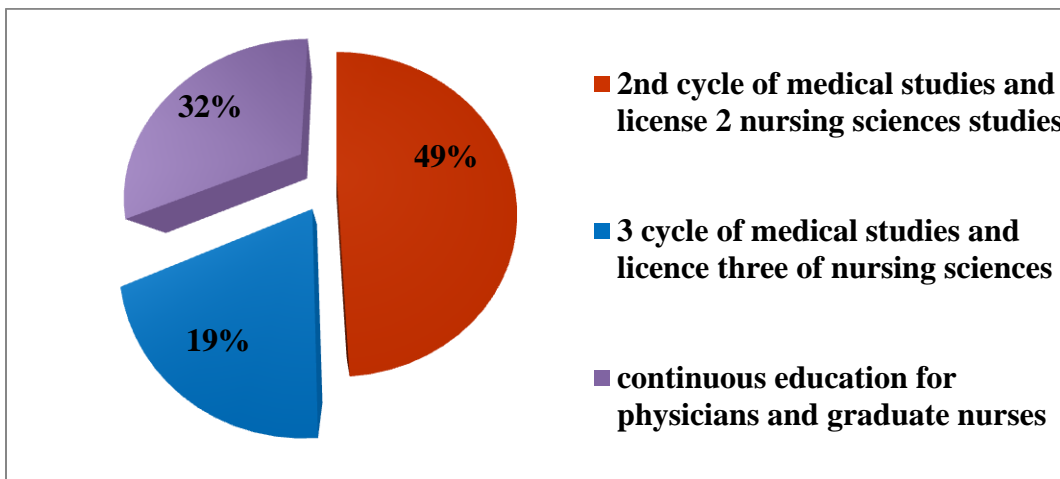


Figure (3): Percentage of participants' responses related to training timelines.

49 % of participants prefer integrating education/training during the second cycle of medical studies and the license two of nursing sciences. 32% of them prefer integrating the program as a continuous education/training for both physicians and graduate nurses.

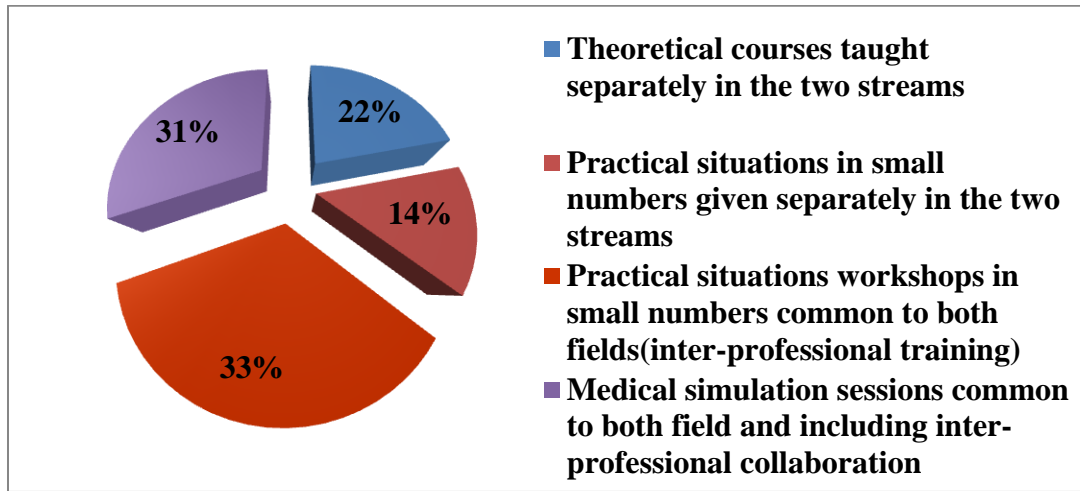


Figure (4): Percentage of participants’ responses related to training modalities.

33% of participants prefer practical situations workshops in small numbers common to both fields. 31% of them prefer medical simulation sessions common to both field and including inter-professional collaboration.

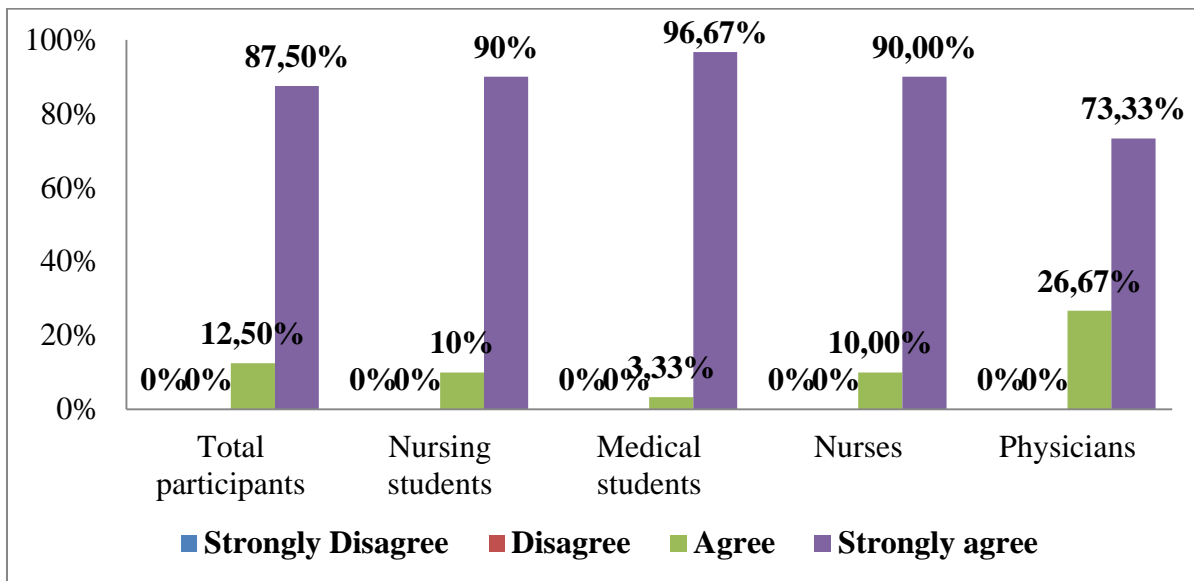


Figure (5): Percentage of participants’ responses on the JSAPNC related to shared education and team work.

90% of nursing students, 96.67% of medical students, 90% of nurses and 73.33% of physicians reported strong positive attitude towards shared education and teamwork.

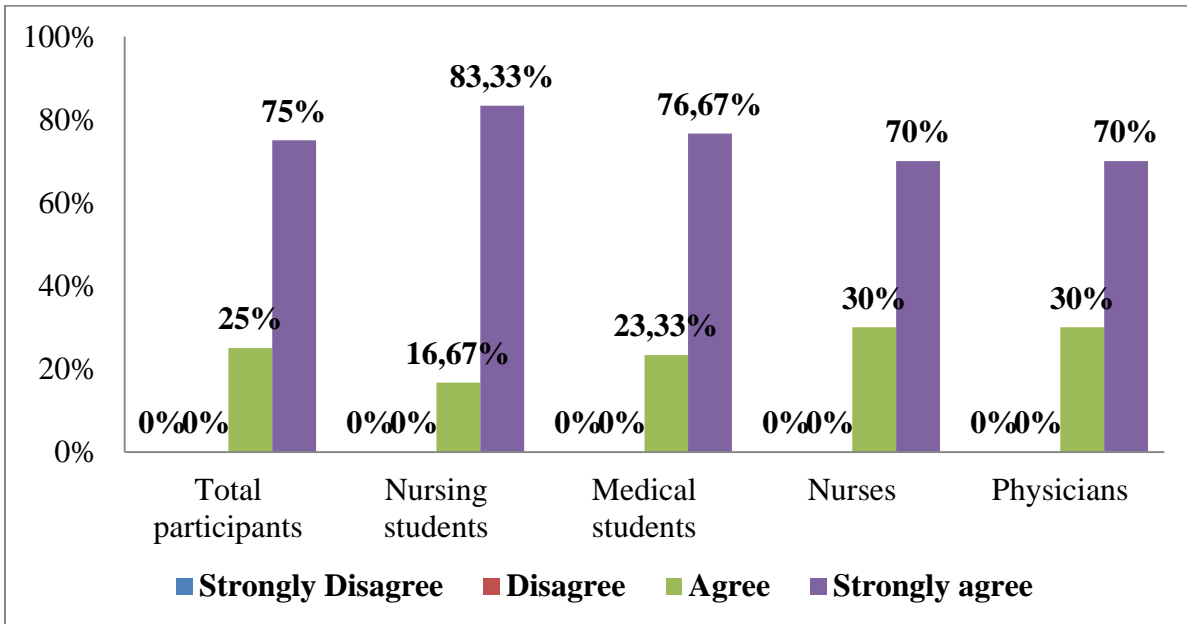


Figure (6):

Percentage of participants' responses on the JSAPNC related to care versus cure.

83.33% of nursing students, 67.67% of medical students, 70% of nurses and 70% of physicians reported strong positive attitude toward care versus cure.

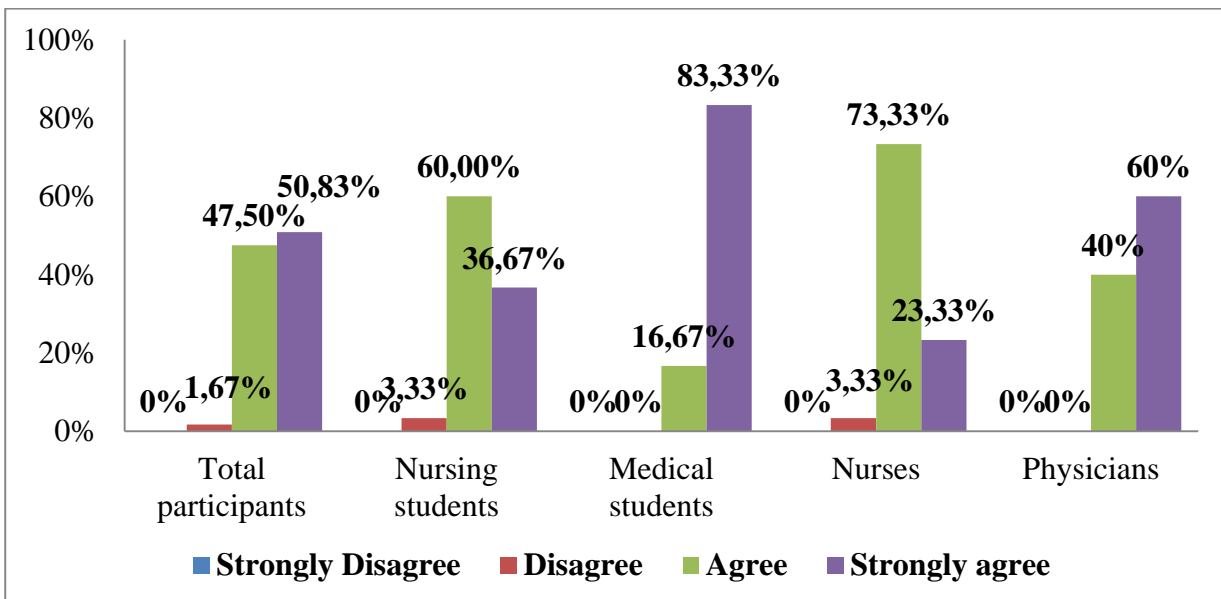


Figure (7):

Percentage of participants' responses on the JSAPNC related to nurse's autonomy.

83.33% of medical students and 60% of doctors showed strong positive attitudes towards nurse's autonomy. 60% of nursing students and 73.33% of nurses reported positive attitudes towards their autonomy.

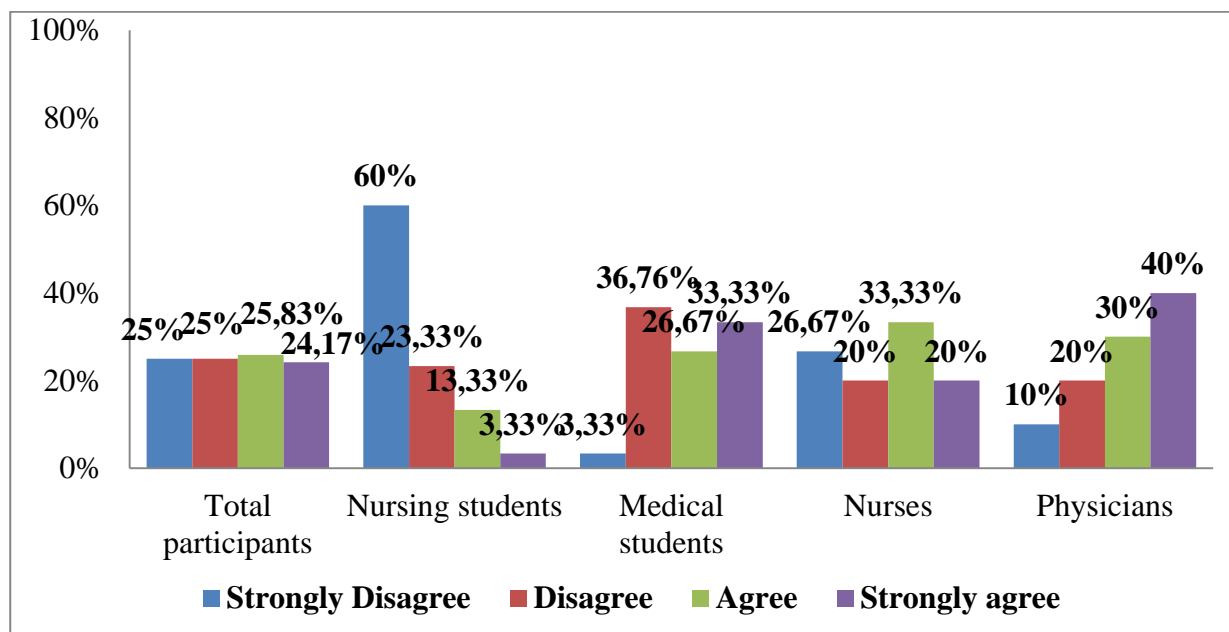


Figure (8):

Percentage of participants' responses on the JSAPNC related to physician's dominance.

33.33% of medical students and 40% of physicians reported strong positive attitude toward physician's dominance. 60% of nursing students and 26.67% of nurses reported strong negative attitudes towards physician's dominance.

Table (1): Attitudes towards Physician-Nurse Collaboration subscales (Mean \pm SD) based on healthcare status.

	Nursing Students (n=30) Mean \pm SD	Medical Students (n=30) Mean \pm SD	Nurses (n=30) Mean \pm SD	Physicians (n=30) Mean \pm SD
Teamwork /shared education	24.33 \pm 02.04	24.97 \pm 01.83	23.93 \pm 01.99	24.00 \pm 02.45
Care versus cure	10.47 \pm 01.01	10.30 \pm 01.34	10.70 \pm 01.41	10.13 \pm 01.07
Nurse's autonomy	08.80 \pm 01.30	10.70 \pm 01.24*	08.50 \pm 01.70	09.87 \pm 01.63*
Physician's dominance	02.90 \pm 01.52 ⁰	05.13 \pm 01.88	04.47 \pm 01.92	05.47 \pm 02.06

*Significantly higher than nurses and nursing students; ⁰ Significantly higher than physicians and medical students.

Statistically significant differences were found between the four groups in The Jefferson Scale of Attitudes towards Physician-Nurse Collaboration (Table 1). The Bonferroni adjustment shows a significant difference at the level of Nurse's autonomy, ($F_{3,116}=2.063$, $p<0.05$, $n^2=0.299$), Physician's dominance ($F_{3,116}=2.158$, $p<0.05$, $n^2=0.217$). Medical students' and physicians showed higher mean values of positive attitudes on nurse's

autonomy. Nursing students showed higher means values of negative attitudes on physician's dominance. There were not significant differences between the two groups in the other factors.

As summary, majority of all of our participants agree that physicians and nurses should work as a "team" and have shared collaborative education and training. Percentages of positive attitudes to teamwork among nurses were higher compared to physicians. Our results are similar to those of Karima et al (2011) and Hanson et al (2010). Authors have shown that nurses have more positive attitudes towards collaboration than physicians. Elsous et al (2018) conducted a study among 414 nurses and physicians at two main public referral hospitals in the Gaza Strip, Palestine. Nurses expressed more positive attitudes towards collaboration than physicians. Elsous et al (2017) indicate that teamwork approach in professional practice must be recognized by taking into account the fact that nurses are partners in patient care (Elsous et al., 2017). Medori (2018) also confirms active and collaborative role of nurse–firefighter within a corresponding medical device SAMU in Haute–Corse. As conclusion, study demonstrates that active intervention of nurses in emergency situations is very beneficial and allows reduction in the time taken to take charge. The recognition of clinical situations by the nurse through the implementation of a nursing protocol for emergency care with rapid initiation and active therapy was pointed out. Medori thus insists on the fact that this protocol requires close collaboration with physicians (Medori, 2018).

Regarding "care versus cure", the majority of participants strongly agreed with the fact that one of the main roles of a nurse is "caring" (with all that "caring" refers to). Caring approach is grounded in being-in-relationship, and recognizes the connections that unfold in diverse but concentric circles of care. Care is thus the essence of nursing practices and is the unifying point of nursing care. Paynton (2008) showed that nurses contribute to the evolution of therapeutic relationship by supporting physician to hear the patient's point of view. They could thus base themselves in the care relationships in order to promote therapeutic decision-making process (Paynton, 2008). Nurses should be included with physicians on major organizational committees that establish patient care policies and procedures. This would foster strong and productive relationships

between nurses and physicians and contribute to the necessary interdisciplinary richness (Hinshaw, 2002). However, work overload inflicted on nurses, lack of pedagogy and training in term of patient education and communication skills can be a factor affecting nurse's role in the care process (Karimi et al., 2019).

The study also showed that medical students' and physicians showed higher mean values of positive attitudes on "nurse's autonomy". Nursing students showed higher means values of negative attitudes on "physician's dominance". There were not significant differences between the two groups in the other factors. From the very beginning of research on nursing, the concept of autonomy has often been associated with a healthy work environment that allows nurses some freedom of practice and decision-making (McClure et al. 1983). In the Canadian context, for example, attributes that improve the work life of nurses have been identified. It has been shown that healthcare professionals, and in particular physicians, improve the work and autonomy of Canadian nurses (Freeman & O'Brien-Pallas, 1998; Laschinger et al. 2003; O'Brien-Pallas & Baumann, 2000). Also, Baumann et al. (2001) pointed out that nurses were more satisfied with their jobs and more loyal to their employers when they were respected for their expertise and when they were able to provide decisions within their work environment (Baumann et al., 2001).

The nurse consultation is a perfect example to illustrate the autonomy of nurses. Previous research suggests that nurses are more satisfied with their work environment when they have more autonomy. The ability to make decisions about patient care and the organization of one's own work has been reported to be associated with better job satisfaction (Ann Seago, 2006).

4. Conclusion

The aim of our research was to understand the attitudes of physicians, nurses, medical and nursing students towards physician-nurse collaboration and shared educational training in collaboration. The concept of collaboration is essential in the development of an effective working partnership. Results adhered to various theoretical contributions and researches related to professional collaboration in term of joint educational trainings and health care services. Results showed that overwhelmingly all of our participants

presented positive attitudes toward teamwork, shared education / training related to collaboration. In the sample as a whole, positive orientations towards nurse's autonomy were moderately more pronounced while positive orientations towards physician's dominance were weakly pronounced. This work leads to point out the importance of the development of nursing skills via the improvement of educational programs. It would be very interesting to wonder about the importance of such a training method and to see its impact on medical team members in resolution of problems according to real scenarios. We therefore suggest, for future research, to enlarge the sample size and to verify whether others variables, such as age, gender and professional experiences would have an impact on the perceptions and attitudes of nurses with regard to physicians–nurse collaboration.

References and Referrals

- Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J., & Weber, A.L. (1999). Organization and outcomes of an inpatient AIDS ward. *Medical Care*, 37(8), 760-767.
- Ann Seago, J. (2006). Autonomy: a realistic goal for the practice of hospital nursing?. *Aquichan*, 6(1), 92-103.
- Baumann, A., O'Brien-Pallas, L., Armstrong-Stassen, M., Blythe, J., Bourbonnais, R., Cameron, S., et al. (2001). *Commitment and Care: The benefits of a healthy workplace for nurses, their patients and the system*. Ottawa: Canadian Health Services Research Foundation.
- Blumberg, H. H. (1994). Cooperation, competition and conflict resolution. Dans A. P. Hare, H. H. Blurnberg, M. F. Davies, & M. V. Kent (Eds), *Smaïïgroïtpresearch.A handbook* (pp. 2 13-236). Norwood, NJ: Ablex Publishing Corporation.
- Boev. C., Xia, Y. (2015). Nurse-physician collaboration and hospital-acquired infections in critical care,” *Critical CareNurse*, vol. 35, no. 2, pp. 66–72.
- Brna, P. (1998, August 3-7). Models of collaboration. In Proceedings of BCS'98: XVIII Congresso Nacional da Sociedade Brasileira de Computação, Belo Horizonte, Brazil.
- Buchan, J. (1999). Still attractive after all these years? Magnet hospitals in changing health care environment. *Journal of Advanced Nursing*, 30(1), 100-108.
- Davis, J. H. (1969). *Gro;tp performance*. Menlo Park, CA: Addison-Wesley.

- Deutsch, M. (1982). Interdependence and psychological orientation. Dans V. J. Derlega, & J. Grzelak (Eds), *Cooperation and helping behaviour* (pp. 15-42). New York: Academic Press.
- Elsous, A., Radwan, M., & Mohsen, S. (2017). Nurses and physicians attitudes toward nurse-physician collaboration: A survey from Gaza Strip, Palestine. *Nursing research and practice, 2017*.
- Freeman, T., & O'Brien-Pallas, L. (1998). Factors affecting job satisfaction on specialty nursing units. *Canadian Journal of Nursing Administration, 11*(3), 25-51
- Giesen, G. (2002). *Creating collaboration: A process that works!* Greg Giesen & Associates.
- Hansson A, Arvemo T, Marklund B, Gedda B, Mattson B. (2009). Working Together Primary Care Doctors' and Nurse Attitudes to Collaboration. *Scandinavian Journal of Public Health; 38*; 78-85. Epub 2009 Sep.17 <http://sjp.sagepub.com>
- Heinemann, G. D. (2002). Teams in health care settings. Dans G. D. Heinemann, & A. M. Zeiss (Eds), *Team performance in health care* (pp. 3-18). New York: Kluwer Academic/Plenum Publishers.
- Hinshaw, A.S. (2002). Chapter 4. Building magnetism in health organizations. In M.L. McClure & A.S. Hinshaw (Eds.), *Magnet hospitals revisited: Attraction and retention of professional nurses* (pp. 83-102). Washington, DC: American Nurses Association.
- Hojat M, Spandorfer J, Isenberg GA, et al. Psychometrics of the scale of attitudes toward physician-pharmacist collaboration: a study with medical students. *Med Teach 2012; 34*:e833- 7.
- Karima A, Sayed EL, Wafaa, F.S. (2011). Nurse Physician Collaboration; A Comparative Study of The Attitudes of Nurses and Physicians at Mansoura University Hospital. *Life science Journal; 8*(2). <http://www.lifesciencesite.com>
- Karimi, M. H., Emani, Z.A., Mirhaghi (2016), « Patient Education among Nurses: Bringing Evidence into Clinical Applicability in Iran », *Investigacion y Educacion en Enfermeria*, vol. 34, n° 1, pp. 137-151.
- Kramer, M., & Schmalenberg, C. (2003). Securing "good" nurse physician relationship. *Nursing Management, 34*(7), 34-38.
- McClure, M. L., Poulin, M. A., Sovie, M. D., & Wandelt, M. A. (1983). *Magnet hospitals: Attraction and retention of professional nurses*. Kansas City, MO: American Nurses Association.

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- Medori, T. (2018). *Evaluation de la place de l'Infirmier Sapeur-Pompier au sein d'un dispositif Médecin Correspondant SAMU en Haute-Corse: étude Descriptive Juillet 2016-Mars 2018* (Doctoral dissertation).
- Mulidan.,Dewi, E. S ., Diah, A. (2019). The Influence of Reinforcing Nurse-Doctor Inter-professional Collaboration on Patient Safety Target at RSUP H. Adam Malik, Medan. IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 8, Issue 5 Ser. VIII. (Sep-Oct .2019), PP 43-49 www.iosrjournals.org.
- O'Brien-Pallas, L., & Baumann, A. (2000). Towards evidence-based policy decisions: A case study of nursing human resources in Ontario, Canada. *Nursing Inquiry*, 7(4), 248-257.
- PAYNTON S. T. (2008), « The Informal Power of Nurses for Promoting Patient Care », *The online Journal of Issues in Nursing*, vol. 14, n° 1[Enligne]<http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No1Jan09/ArticlePreviousTopic/InformalPowerofNurses.htm>
- Welp, A., Meier, L. L., & Manser, T. (2016). The interplay between teamwork, clinicians' emotional exhaustion, and clinician-rated patient safety: a longitudinal study. *Critical care*, 20(1), 110.