

A study of empathy and interpersonal responsiveness among psychiatric nurses and nursing student interns.

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Abstract: The objective of our research was to investigate the empathy and selected interpersonal reactivity of psychiatric nurses and undergraduate nursing students and to examine whether the gender factor could influence psychiatric nurses' empathy. 140 subjects participated in our study. They were divided into two groups: psychiatric nurses (n = 70) working in the psychiatry departments and undergraduate nursing students (n = 70) in their 3rd year of a bachelor's degree in nursing sciences who have completed their internship in psychiatry. They all responded to a preliminary questionnaire, the Scale of Nurse Perception of Own Empathy (SNPOE), the Interpersonal Reactivity Index (IRI), and the Questionnaire of Cognitive and Affective Empathy (QCAE). Results indicated that the majority of participants believe that the nursing role is important in psychiatry, and almost the majority of them possess certain knowledge about the meaning of empathy in a therapeutic relationship. In terms of the nurse's perception of their own empathy, there was no significant difference between the two groups. In terms of cognitive empathy, psychiatric nurses presented a significantly higher average on empathic concern than undergraduate nursing students. There is no significant difference in the other subscales. In terms of affective empathy, undergraduate nursing students had a significantly higher average on the proximal responsivity than psychiatric nurses. There was no significant difference in the other subscales. Among psychiatric nurses, female psychiatric nurses outperformed male psychiatric nurses in empathy and interpersonal reactivity. The study was able to highlight the importance of interpersonal reactivity and empathy within the therapeutic relationship in psychiatry. It is important to know that the mental health nursing profession deserves all its legitimacy and needs to be more developed in terms of training and education.

Keywords: Empathy; Interpersonal responsiveness; Nursing students; Psychiatric nurses

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I- Introduction :

A psychiatric nursing profile requires a set of well-defined professional and personal skills that are essential in practice. Knowing how to be when providing care is a key element, especially by highlighting the humanization of care (Hussein & Mohamed, 2020). The caregiver must possess specific interpersonal skills in order to be successful in care activities. These skills optimize person-centered care to advance (McCormack & McCance, 2017). Empathy is a fundamental skill in caring activities and helps patients achieve better adherence and wellbeing. It optimizes the quality of care and helps caregivers and patients work together (Hussein & Mohamed, 2020). Empathy is a fundamental skill that advances the helping relationship (Townsend, 2013). The helping relationship is a therapeutic relationship intended to enhance the patient's ability to confront obstacles and constraints by mobilizing their own resources. In mental health, Peplau's (1997) Theory of Interpersonal Relations highlights the importance of the nurse-patient therapeutic relationship (Peplau, 1970).

The most important characteristic of empathy is the ability to understand another person's experience. Empathic understanding is based on the correct perception of the subjective world and experiences of others without losing sight of the fact that it is an analogous situation (Rogers, 1980). Empathy is different from sympathy. Sympathy is the possibility of merging into the same emotional experience and sharing a feeling or a belief through the phenomenon of emotional contagion. It is about caring about the well-being of others. On the other hand, empathy is the ability to represent the feelings and beliefs of others. It is a conscious mental simulation of the subjectivity of others. It is about understanding others (Boulanger & Lançon, 2006). Also, it is important to acknowledge the difference between cognitive empathy and affective empathy. Cognitive empathy is a cognitive process in which a person integrates information from the environment in order to understand the context and emotional weight of a situation. It is the capacity to construct a functional model of the emotional states of another person. Affective empathy refers to the intuitive response to the circumstances of another person's life, which depends on selecting the correct emotional response. It is the skill of being sensitive to the feelings of others (Reniers et al., 2011).

Empathy is a skill psychiatric nurses have to develop in order to be able to understand the meanings of patients' feelings and thoughts and to communicate that understanding back to them. The empathetic reaction of psychiatric nurses must be more or less adapted depending on the situation; it can be initiated following the total concordance between the patient's feelings or the feeling of being concerned by what the latter is experiencing. Empathy is the ability to perceive the subjective experiences of others. It is considered a human characteristic, a professional state, and a phenomenon that can be promoted through a caring relationship. There are two types of empathy: innate empathy and learned empathy. Learned empathy can be logically learned through nursing education (Moussa, 2015).

Empathy can be taught (Davis, 1994; Hojat, 2009). Previous studies confirm that empathy in healthcare settings is enhanced through specific education and training. A scientific study at the Alexandria Faculty of Nursing shows that educational experience in mental health improves levels of empathy among nursing students. The study aimed to evaluate the impact of completing a psychiatric nursing educational experience on the level of empathy toward patients with mental illness among baccalaureate nursing students. The results demonstrated that all students outperformed in terms of empathy after the psychiatric nursing educational experience. Also, the

present study indicated that, after the experience of psychiatric nursing, male nursing students outperformed in levels of empathy compared to female students. (Moussa, 2015). On the other hand, other research has been conducted to understand the effect of gender in the construction of affective and cognitive responses in empathic expression. Gender is a very selective element in empathic concern, given that some research has demonstrated that females may be more empathetic than males (Gleichgerrcht and Decety, 2013; Ouzouni & Nakakis, 2012; Williams et al., 2014). However, little is known about the impact of academic education on empathy among nursing students (Moussa, 2015), and more studies are required to address the concept of empathy in psychiatry within the Arab world. The lack of conceptual clarity about empathy in nursing education could affect our ability to emerge with effective training. Sometimes, it is not easy for an undergraduate nursing student to distinguish empathy from sympathy (Helander, 2016). To fully understand this concept, it is necessary to implement differential concepts and related notions such as sympathy and compassion (Fernandez & Zahavi, 2020).

Empathy is considered one of the fundamental skills of mental health care. It needs a more attentive practice for holistic care (Gambarelli et al., 2020). In the Arab world, and more particularly in Tunisia, few studies have been interested in understanding the phenomenon of empathy among undergraduate nursing students and future psychiatric nurses. The main goal of our research is to evaluate the empathy of psychiatric nurses and undergraduate nursing students who have completed their psychiatric internship towards patients with mental health problems, as well as to verify the impact of gender on the empathic levels of psychiatric nurses.

II– Methods and Materials:

1. Study sample:

The study included 140 nurses and undergraduate nursing students (61 males and 79 females). Participants were divided into two groups: nurses (n = 70) working in various psychiatric services with an average age of 35.94, and undergraduate nursing students (n = 70) studying in the third year of their bachelor's degree within the average age of 21.66 and having completed their psychiatric internship. We selected our sample based on specific inclusion and exclusion criteria. Male and female participants were included. Undergraduate nursing students are in their 3rd year of a bachelor's degree in nursing sciences belonging to the Higher Institute of Nursing Sciences of Tunis, and they have already completed their internship in psychiatry. Psychiatric nurses work in different psychiatric services in Tunisia. We excluded nurses who do not work in psychiatric services, students in 1st and 2nd years of a nursing degree from the Higher Institute of Nursing Sciences of Tunis, 3rd year students of a nursing degree belonging to other institutes of nursing, and all other nursing students not belonging to the Higher Institute of Nursing Sciences of Tunis. We also excluded any other health personnel not belonging to the nursing discipline, participants who did not respond to the entire questionnaires, and those who requested to withdraw from the study.

2. Measures:

The study was carried out using a series of tools that were carefully selected following a review of the literature and an in-depth scientific reading of various research studies carried out on this subject. A preliminary short survey was developed based on the literature review while taking into account the Tunisian context. The survey contains fourteen items. It is divided into two parts. The first part contains five items that allow sociodemographic data to be collected. The second part of

the survey aims to evaluate the perception of empathy and the training related to empathy among psychiatric nurses and undergraduate nursing students. A survey pre-test was carried out to ensure the clarity of the items. The pretest didn't reveal any changes. Also, the Scale Nurse Perception of Own Empathy (SNOPE) by Grosseman et al. (2014) was used. The questionnaire contains five items, the responses to which are rated on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This tool was developed in order to assess empathy toward patients. The rating potential varies from a minimum of 5 to a maximum of 35. A higher score would indicate a more empathetic nurse (Grosseman et al., 2014). The Interpersonal Reponsivity Index (IRI) of Davis' (1983) was used. This tool defines empathy as one person's reactions to observed experiences of another. The tool consists of 28 items based on a Likert-point scale from 1 (does not describe me well) to 5 (describes me very well). Items are coded respectively from 0 to 5, except items 3, 4, 7, 12, 13, 14, 15, 18, and 19, which are reverse coded. The tool evaluates different subscales, and each subscale is made up of 7 different items: (1) perspective-taking. (2) Fantasy (3) empathic concern; and (4) personal distress (Davis, 1983). Internal consistency coefficients range from 0.68 to 0.79. Test-retest reliability ranged from 0.61 to 0.81 (Davis, 1980). Finally, the Questionnaire of Cognitive and Affective Empathy (QCAE) by Reniers (2011) was administered. This questionnaire assesses cognitive empathy and affective empathy. It consists of 31 items and is made up of five subscales. Two subscales indicate cognitive empathy: (1) perspective-taking (items 15, 16, 19, 20, 21, 22, 24, 25, 26, and 27) and (2) online stimulation (items 1 (r), 3, 4, 5, 6, 18, 28, 30, and 31). Three subscales indicate affective empathy: (3) emotional contagion (items 8, 9, 13, and 14), (4) proximal reponsivity (items 7, 10, 12, and 23), and (5) peripheral reponsivity (items 2 (r), 11, and 17 (r), 29 (r)). Items are coded based on four Likert points ranging from 1 (strongly disagree), 2 (slightly disagree), 3 (slightly agree), and 4 (strongly agree). The two cognitive subscales are summed to give a cognitive empathy score, and the three affective subscales are summed to produce an affective empathy score. The sum of cognitive and affective empathy scores represents the cumulative total empathy score (Reniers, 2011).

3. Procedures and ethical considerations:

The study was carried out during the period of February 21 to March 9, 2023. It was conducted after obtaining the approval of the Research Projects Committee of the Higher Institute of Nursing Sciences of Tunis. Also, we obtained the approval of the director of the Higher Institute of Nursing Sciences of Tunis, as well as the approvals of psychiatry department heads. After expressing free and informed consent, all participants were invited to complete the questionnaires. Before assessments, the aim and nature of the study were explained. Confidentiality and anonymity were guaranteed. Two types of handovers were carried out: a paper version was handed out to psychiatric nurses, and an online version was settled for the undergraduate nursing students due to their unavailability following their internship, which was carried out in their regions of residence.

4. Statistical Data processing Methods:

Independent variables are status, made up of "nurses" working in a psychiatric environment and "students" in the 3rd year of a bachelor's degree in nursing sciences, and gender among psychiatric nurses. The dependent variables on which the study is based are empathy and interpersonal responsiveness. The evaluation of our variables was done via scores obtained from the responses to the questionnaires, including a preliminary questionnaire, the Scale of Nurse Perception of Own Empathy (SNPOE), the Interpersonal Reponsivity Index (IRI), and the Questionnaire of Cognitive

and Affective Empathy (QCAE). After data collection, all participants' responses were coded. Statistical data was processed using Excel software and represented in the form of graphs and tables. Multiple parameters, such as percentages, means, and standard deviations, were calculated using the SPSS tool. We also carried out statistical analysis in order to verify the existence of significant differences.

III- Results and discussion :

Figure (1): Gender distribution based on status.

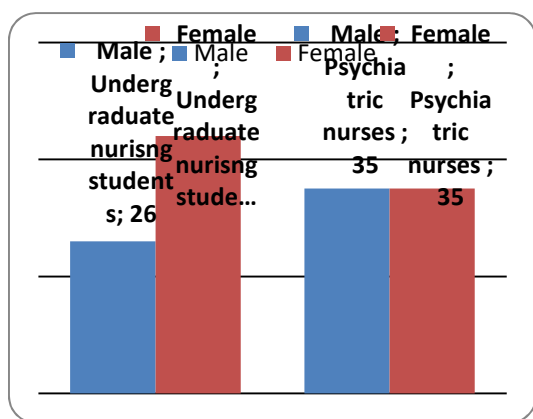
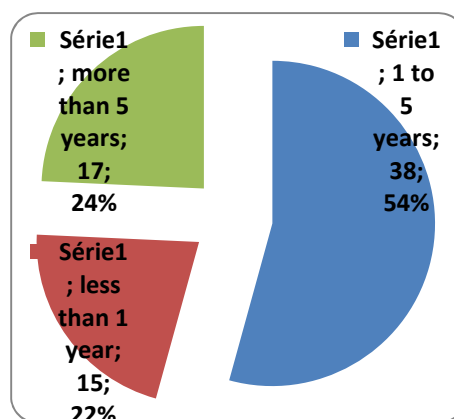


Figure (2): Distribution of psychiatric nurses according to years of experiences.



The gender distribution in the entire sample shows that we have 79 women and 61 men. Undergraduate nursing students consist of 44 females and 26 males. Psychiatric nurses consist of 35 females and 35 males (Fig. 1). In terms of the distribution of psychiatric nurses according to years of professional experience in psychiatric environments, 54% of psychiatric nurses have 1 year to 5 years of experience, 24% of them have more than 5 years of experience, and 22% of them have less than 1 year of experience (Fig. 2).

Figure (3): Interest in working or doing an internship in the psychological field.

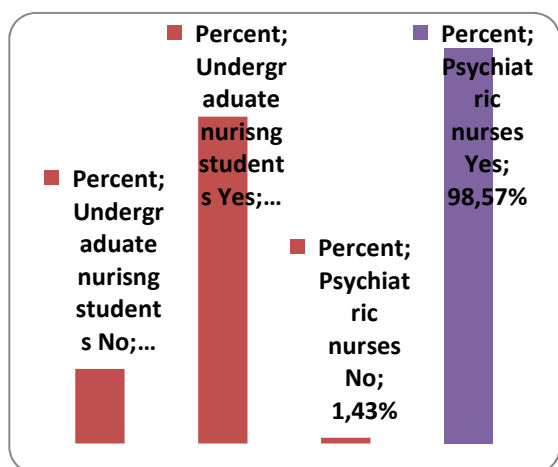
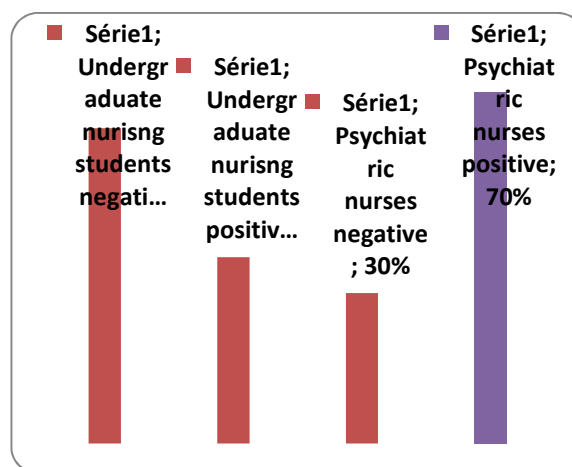


Figure (4): The image of nursing profession in mental health before working or internship.



92.86% of psychiatric nurses and 47.14% of undergraduate nursing students are interested in working in the field of mental health (Fig. 3). 70% of psychiatric nurses and 37.14% of undergraduate nursing students have a positive image of the nursing profession in the field of mental health (Fig. 4).

Figure (5): The importance of the nursing role in mental health.

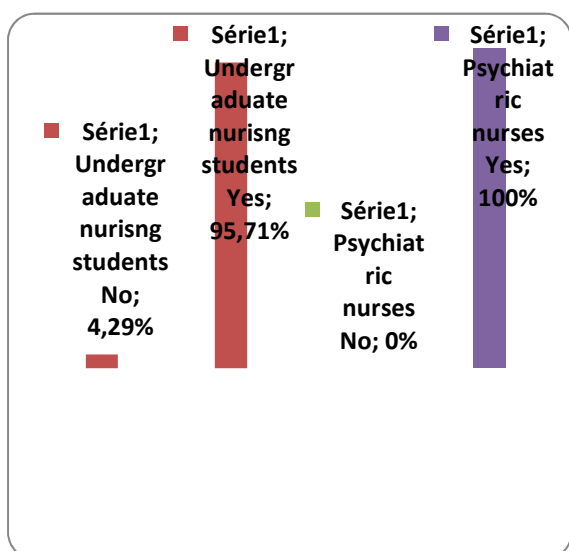
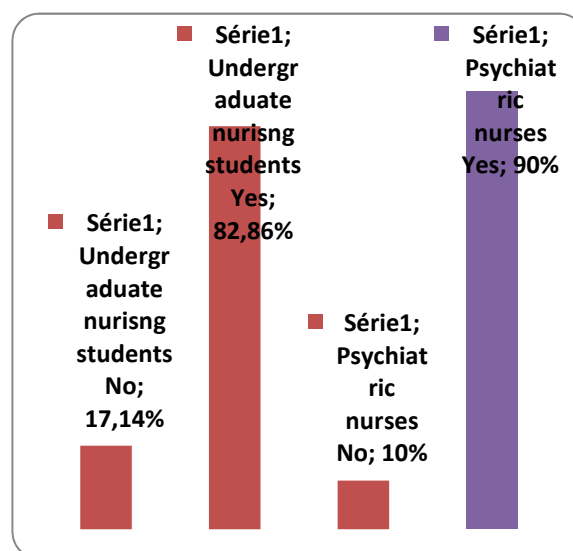


Figure (6): Knowing the meaning of empathy in therapeutic relationship.



100% of psychiatric nurses and 95.71% of undergraduate nursing students confirm that nursing roles are important in mental health (Fig. 5). 90% of psychiatric nurses and 82.86% of undergraduate nursing students know the meaning of empathy in therapeutic relationships (Fig. 6).

Figure (7): Know the difference between empathy, compassion and sympathy.

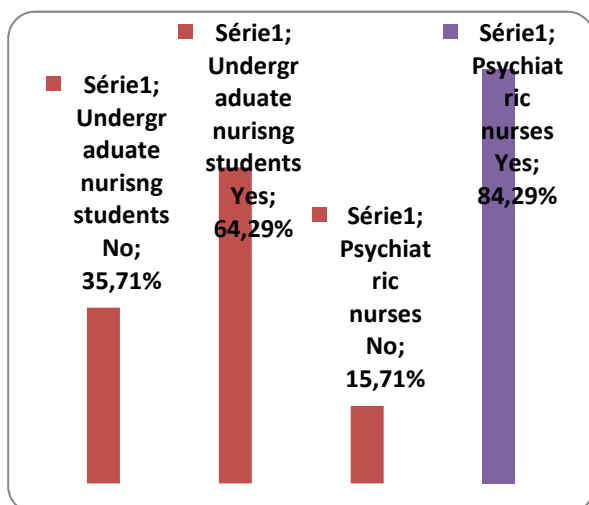
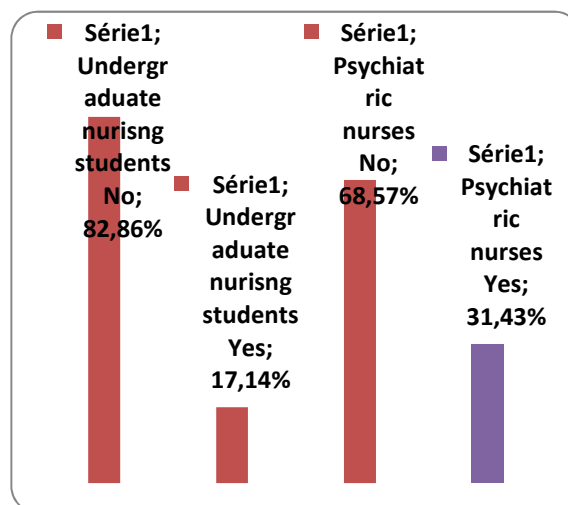


Figure (8): Academic training is sufficient to train nurses to be empathetic.



84.29% of psychiatric nurses and 64.29% of undergraduate nursing students know the difference between empathy, compassion, and sympathy (Fig. 7). 31.43% of psychiatric nurses and 17.14% of undergraduate nursing students confirm that academic training is sufficient to train nurses to be empathetic within the therapeutic relationship (Fig. 8).

Figure (9): Training on interpersonal skills in the therapeutic relationship is important.

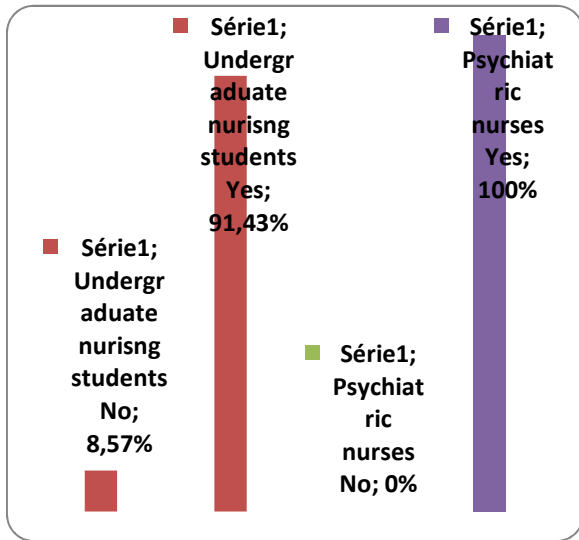
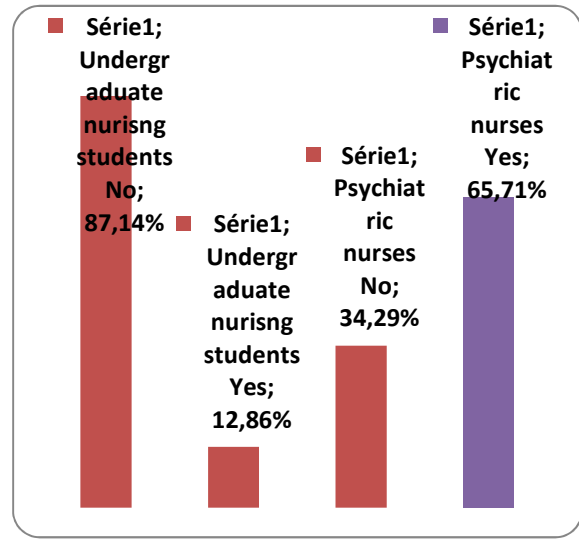


Figure (10): Participation in training sessions on empathy in the therapeutic relationship.



100% of psychiatric nurses and 91.43% of undergraduate nursing students confirm that training interpersonal skills in the therapeutic relationship is important (Fig. 9). 65.71% of psychiatric nurses and 12.86% of undergraduate nursing students confirm their participation in training sessions on empathy (Fig. 10).

Table (2): Means (M), Standards Deviation (SD) in the SNOPE and in the subscales of IRI.

	Undergraduate nursing students Mean ± SD	Psychiatric nurses Mean ± SD
Nurse Own empathy perception	22.071 ± 5.536	23.257 ± 6.035
Perspective taking	21.614 ± 3.605	22.571 ± 4.049
Fantasy	22.414 ± 4.258	20.971 ± 5.556
Empathic concern	23.257 ± 3.962	25.757 ± 5.103°
Personal distress	20.629 ± 4.421	20.2 ± 4.551

In terms of the nurse's perception of their own empathy, undergraduate nursing students have an average response of 22.071. Nurses have an average response of 23.257. No significant differences between the two groups were found. There is no significant difference between the two groups. In terms of perspective-taking, psychiatric nurses have an average response of 22.571, and undergraduate nursing students have an average response of 21.614. In terms of fantasy, psychiatric nurses have an average response of 20.971, and undergraduate nursing students have an average response of 22.414. In terms of empathic concern, psychiatric nurses have an average response of

25.757, and undergraduate nursing students have an average response of 23.257. In terms of personal distress, psychiatric nurses have an average response of 20.2, and undergraduate nursing students have an average response of 20.629. A significant difference was found in terms of empathic concern. In terms of empathic concern, a significant difference exists between psychiatric nurses and undergraduate nursing students. Psychiatric nurses have a significantly higher average than undergraduate nursing students. There is no significant difference in the other domains. (Tab. 2).

Table (3): Means (M), Standards Deviation (SD) in the subscales of the QCAE.

	Undergraduate nursing students	Psychiatric nurses Mean ± SD
Perspective Taking EC	27.186 ± 6.749	26.671 ± 5.423
Emotional contagion EA	10.586 ± 2.651	10 ± 2.22
Online stimulation EC	26.514 ± 4.757	26.4 ± 3.577
Proximal responsivity EA	10.743 ± 2.558°	9.571 ± 2.942
Peripheral responsivity EA	9.8 ± 1.975	9.829 ± 1.841

In terms of perspective-taking, psychiatric nurses have an average response of 26.67, and undergraduate nursing students have an average response of 27.19. In terms of online stimulation, psychiatric nurses have an average response of 26.4 and undergraduate nursing students have an average response of 26.51. In terms of emotional contagion, psychiatric nurses have an average response of 10, and undergraduate nursing students have an average response of 10.59. In terms of proximal reponsivity, psychiatric nurses have an average response of 9.57, and undergraduate nursing students have an average response of 10.74. In terms of affective empathy/proximal responsivity, a significant difference exists between psychiatric nurses and undergraduate nursing students. Undergraduate nursing students have a significantly higher average on proximal responsivity than psychiatric nurses. There is no significant difference in the other domains. (Tab. 3).

Table (4): Means (M), Standards Deviation (SD) in the SNOPE and in the subscales of IRI among psychiatric nurses.

	Empathy perception Mean ± SD	Perspective taking Mean ± SD	Fantasy Mean ± SD	Empathic concern Mean ± SD	Personal distress Mean ± SD
Female	26.371 ± 4.525°	24.629 ± 3.703°	24.457 ± 4.133°	29.086 ± 3.633°	23.171 ± 4.566°
Male	20.143 ± 5.786	20.514 ± 3.293	17.486 ± 4.533	22.429 ± 4.104	17.229 ± 1.734

A significant difference between males and females in terms of their perception of their own empathy was noted. Female psychiatric nurses have a significantly higher average than male psychiatric nurses. In terms of interpersonal responsiveness, there are very significant differences between males and females in all areas. Female psychiatric nurses have significantly higher

averages than male psychiatric nurses in perspective-taking, fantasy, empathic concern, and personal distress. (Tab.4).

Table (5): Means (M), Standards Deviation (SD) in the subscales of the QCAE among psychiatric nurses.

	Perspective Taking EC Mean ± SD	Emotional contagion EA Mean ± SD	Online stimulation EC Mean ± SD	Proximal responsivity EA Mean ± SD	Peripheral responsivity EA Mean ± SD
Female	27.829 ± 5.544	10.686 ± 2.285°	27.314 ± .825°	9.314 ± 1.891°	10.943 ± 2.496°
Male	25.514 ± 5.118	9.314 ± 1.952	25.486 ± 3.1	10.343 ± 1.662	8.2 ± 2.731

In terms of cognitive empathy, there is a significant difference between males and females on the online stimulation subscale. In terms of affective empathy, there are significant differences between males and females in emotional contagion and peripheral responsivity and a very significant difference in proximal responsivity. Female psychiatric nurses have significantly higher averages than male psychiatric nurses for the areas mentioned above. (Tab.5).

Mental health is one of the major issues in public health; therefore, psychiatric nurses are called upon to provide the best skills and the best relational care to patients with mental health problems so that they can be more independent and live their health experiences healthily. In this regard, we carried out a comparative descriptive survey among psychiatric nurses and nursing student interns who have already completed an internship in psychiatry services. The study aims to evaluate their empathy and interpersonal responsivity, as well as evaluate the impact of gender on the empathic profile and interpersonal responsivity of psychiatric nurses. The entire sample questioned believes that the nursing role is important in psychiatry and mental health settings. Our results are similar to those of the study conducted by Chapman et al (2018). This study showed that mental health nurses can contribute positively to the enhancement of public mental health settings (Chapman et al., 2018). In Tunisia, nursing training continues to be reformed to meet new requirements and new challenges highlighted by epidemiological and socio-demographic changes. Through their broad scope of practice, nurses are considered key players in health promotion, both in prevention and in person-centered care (Shili et al., 2018). The results of our study demonstrated that almost the majority of our participants knew the meaning of empathy in a therapeutic relationship. The historical ambiguity of the concept of empathy is believed to be associated with a shortage of psychometrically robust instruments to measure empathy. Empathy has received immense attention in academia and, in particular, in the teaching curriculum of health professions, including nursing. Understanding the importance and development of empathy for nurses is important. Several studies examined the change in empathy in undergraduate nursing students and demonstrated that a nurse's education during the academic year during the academic year may impact their empathy level. Empathy has a significant place in nursing care within the therapeutic relationship. Studies have reported that this ability can be optimized at both undergraduate and postgraduate levels (Burnero et al., 2010). In terms of the nurse's perception of their own empathy, no significant differences between the two groups were found. Our results are similar to an Arab study in Egypt carried out at the Faculty of Nursing at the University of Alexandria with 204 students with the aim of evaluating the impact of training and clinical immersion in mental health on the empathic attitude of students. This study found that 95.69% of students showed improvement in their empathy levels. This reveals that empathy is a teachable skill, a human capacity promoted through the completion of theoretical content in mental health (Moussa, 2015).

Four domains of interpersonal responsiveness were assessed, which are: “perspective taking,” “fantasy,” “empathetic concern,” and “personal distress.” A significant difference was found in terms of empathic concern. Psychiatric nurses have a significantly higher average than undergraduate nursing students. There is no significant difference in the other domains. Nursing student interns’ students express almost the same level of empathy with nurses’ already practicing mental health. Also In terms of affective empathy and proximal responsivity, a significant difference exists between psychiatric nurses and undergraduate nursing students. Undergraduate nursing students have a significantly higher average than that of psychiatric nurses. There is no significant difference in the other domains of cognitive and affective empathy. These results would be influenced by the effectiveness of the training experience and internship practice. That said, Levett Jones et al (2019) conducted a systematic review in order to understand the effectiveness of empathy interventions in undergraduate nursing education. 23 studies were included. Nine of the 23 empathy education studies reported practical improvement in empathy. Improvements in students' level of empathy were mostly observed in effective interventions such as experiential simulations (Levett-Jones et al., 2019).

Among psychiatric nurses, a significant difference between males and females in terms of their perception of their own empathy was reported. Female psychiatric nurses have a significantly higher average than male psychiatric nurses. In terms of interpersonal responsiveness, there are very significant differences between males and females in all areas. Female psychiatric nurses have significantly higher averages than male psychiatric nurses in perspective-taking, fantasy, empathic concern, and personal distress. In terms of cognitive empathy, there is a significant difference between males and females on the online stimulation subscale. In terms of affective empathy, there are significant differences between women and men in emotional contagion and peripheral responsivity and a very significant difference in proximal responsivity. Female psychiatric nurses have significantly higher averages than male psychiatric nurses for the areas mentioned above. These show that females are more empathetic than males. What is interesting is that our study is similar to research by Hojat (2002), carried out with 704 physicians. The results of the study showed that females presented higher scores than men to a degree that was nearly significant. It has been suggested that females are much more receptive to emotional stimulation than males. The gender difference can be explained by the fact that females show better caring skills towards their offspring compared to men because they have resorted to the helping relationship in the form of parental investment, which makes them more empathetic (Hojat et al., 2002). Neidenthal et al. (2009) explained that there is a difference between the beliefs of the emotional woman and the reasonable man. Women are considered gentler, with great emotional insight, responsiveness, and empathy (Neidenthal et al., 2009). In terms of communication skills, Mi-Won et al. (2018) showed that female nursing students outperformed significantly in listening skills among nine communication skill areas compared to male nursing students. The authors highlighted the importance of improving communication skills for both male and female nursing students through education and training (Mi-Won & Hee-Joo, 2018).

IV- Conclusion:

The objective of our study was to evaluate the empathy and interpersonal responsiveness of psychiatric nurses and undergraduate nursing students who had completed their psychiatric internship towards patients with mental health problems, as well as to identify the impact of gender

on the empathic concern of psychiatric nurses. The results of the research were able to demonstrate that undergraduate nursing students almost express the same level of empathy and interpersonal responsiveness as psychiatric nurses. The study was also able to show that gender is an impactful element on empathy for psychiatric nurses. Our research is well-considered and has an innovative goal, highlighting the mental health nursing profession, which deserves all its legitimacy. As a perspective, it would be important to expand the study in all nursing sciences institutes within the country in order to obtain significant results. That said, the therapeutic relationship is considered a dynamic relationship between caregiver and patient, involving the cohesion of the positions of each actor. This relational positioning is very important in the creation of the therapeutic alliance and makes it possible to improve the quality of care. Also, it would be lucrative to focus on the organization of continuing training sessions in order to develop interpersonal skills such as empathy, presence, active listening, neutrality, and other necessary skills for nurses and post-graduated nursing students.

Referrals and references:

- Boulanger, C., & Lançon, C. (2006, August). L'empathie: réflexions sur un concept. In *Annales Médico-psychologiques, revue psychiatrique* (Vol. 164, No. 6, pp. 497-505). Elsevier Masson.
- Brunero, S., Lamont, S., & Coates, M. (2010). A review of empathy education in nursing. *Nursing inquiry*, 17(1), 65-74.
- Chapman, S. A., Phoenix, B. J., Hahn, T. E., & Strod, D. C. (2018). Utilization and economic contribution of psychiatric mental health nurse practitioners in public behavioral health services. *American Journal of Preventive Medicine*, 54(6), S243-S249.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 1-85.
- Davis, M. H. (1983). Medindo as diferenças individuais em empatia: Evidência para uma abordagem multidimensional. *Jornal de Personalidade e Psicologia Social*, 44(1), 113-126. <https://doi.org/10.1037/0022-3514.44.1.113>
- Fernandez, A. V., & Zahavi, D. (2020). Basic empathy: Developing the concept of empathy from the ground up. *International Journal of Nursing Studies*, 110, 103695.
- Gambarelli, S. F., Taets, C. M. C., & Taets, G. G. D. C. C. (2020). Empathy in Mental Health Nursing Care in Brazil. *Journal Of Nursing Practice*, 4(1), 61-69.
- Gleichgerrcht, E., & Decety, J. (2013). Empathy in clinical practice: how individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. *PloS one*, 8(4), e61526.
- Grossman, S., Novack, D. H., Duke, P., Mennin, S., Rosenzweig, S., Davis, T. J., Hojat, M. (2014). Resident' and standardized patients' perspectives on empathy: Issues of agreement. *Pateint Educatin and Counseling*, 96, 22-28.
- Helander, M. (2016). Communication Development in Psychiatric Nursing: Literature Review.

- Hojat, M., Gonnella, J. S., Nasca, T. J., Mangione, S., Vergare, M., & Magee, M. (2002). Physician empathy: definition, components, measurement, and relationship to gender and specialty. *American Journal of Psychiatry*, 159(9), 1563-1569.
- Hussein, N., & Mohamed, B. (2020). The Effect of Empathy-Based Training Program on Communication Skill and Burnout among Psychiatric Nurses. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 9(1), 43-55.
- Levett-Jones, T., Cant, R., & Lapkin, S. (2019). A systematic review of the effectiveness of empathy education for undergraduate nursing students. *Nurse education today*, 75, 80-94.
- McCormack, B., & McCance, T. (2017). Underpinning principles of person-centred practice. *Person-Centred practice in nursing and health care: theory and practice*, 2, 13-36.
- McDonald, S. M. (2011). Perception : A concept analysis. *International Journal of Nursing Terminologies and Classifications*, no-no.
- Mi-Won, K., & Hee-Joo, L. (2018). Gender comparison of communication skills of nursing students: Video analysis of standardized patient interview. *Int. J. Adv. Nurs. Educ. Res*, 3, 7-14.
- Mousa, M. A. E. G. A. (2015). Empathy toward Patients with Mental Illness among Baccalaureate Nursing Students: Impact of a Psychiatric Nursing and Mental Health Educational Experience. *Journal of Education and Practice*, 6(24), 98-107.
- Niedenthal, P., Krauth-Gruber, S. & Ric, F. (2009). Chapitre 8. Émotion et différences de genre. Dans : , S. Krauth-Gruber, P. Niedenthal & F. Ric (Dir), *Comprendre les émotions: Perspectives cognitives et psycho-sociales* (pp. 275-309). Wavre: Mardaga.
- Peplau, H E. (1997). Peplau's theory of interpersonal relations. *Nursing Science Quarterly*, 10(4), 162–167. <https://doi.org/10.1177/089431849701000407>
- Ouzouni, C., & Nakakis, K. (2012). An exploratory study of student nurses' empathy. *Health Science Journal*, 6(3), 534-552.
- Reniers, R. L., Corcoran, R., Drake, R., Shryane, N. M., & Völlm, B. A. (2011). The QCAE : A questionnaire of cognitive and affective empathy. *Journal of personality assessment*, 93(1), 84-95.
- Rogers, C.R. (1980). The foundations of a person-centered approach. In Carl Rogers, *A Way of Being*. Boston: Houghton Mifflin.
- Shili, H., Daoud, T., Denguir, H., & Ounalli, F. (2018). La profession infirmière en Tunisie. *La Tunisie Médicale*, 96 (10-11), 826-833.
- Townsen Townsend, M. C. (2013). *Essentials of psychiatric mental health nursing: Concepts of care in evidence-based practice*. FA Davis.
- Williams, B., Brown, T., Boyle, M., McKenna, L., Palermo, C., & Etherington, J. (2014). Levels of empathy in undergraduate emergency health, nursing, and midwifery students: a longitudinal study. *Advances in Medical Education and Practice*, 5, 299-306.