

QUALITY OF LIFE AMONG SELECTED FILIPINO ADULTS WITH TRIGEMINAL NEURALGIA

IJROMS
INTERNATIONAL JOURNAL
OF RESEARCH ON MULTIDISCIPLINARY STUDIES
"Bridging Disciplines, Advancing Knowledge"

INTERNATIONAL JOURNAL OF RESEARCH ON MULTIDISCIPLINARY STUDIES

Bridging Disciplines, Advancing Knowledge



Volume: 1

Issue:2

Pages: 154-161

Document ID: 2026IJROMS0022

Manuscript Accepted: March 18, 2026

DOI:<https://doi.org/10.5281/zenodo.19181292>



Quality of Life among Selected Filipino Adults with Trigeminal Neuralgia

Jane F. Legaspi

The School of Graduate Studies, Dr. Carlos S. Lanting College, Quezon City, Philippines

Corresponding Author email: franciscojane1984@gmail.com

Recommended Citation:

Legaspi, J. F. (2026). Quality of life among selected Filipino adults with trigeminal neuralgia. *International Journal of Research on Multidisciplinary Studies*, 1(2), 154–161. <https://doi.org/10.5281/zenodo.19181292>.

Abstract. Trigeminal neuralgia (TN) is a severe chronic neuropathic disorder characterized by recurrent episodes of intense facial pain, significantly impairing functional capacity and overall quality of life. Despite its clinical importance, limited empirical evidence exists regarding quality-of-life outcomes among Filipino populations. This study examined the quality of life of selected Filipino adults diagnosed with TN and investigated the relationships between pain severity, self-care deficits, and multidimensional quality-of-life domains. A quantitative cross-sectional descriptive–correlational design was employed, involving 26 purposively selected participants recruited from an online TN support community in the Philippines. Data were collected using a structured survey comprising demographic variables, the Numeric Rating Scale (NRS) for pain assessment, a self-care checklist based on Orem’s Self-Care Deficit Nursing Theory, and the WHOQOL-BREF instrument. Descriptive statistics and correlation analyses (Spearman’s rho and Pearson’s r) were applied to determine associations among variables. Results indicated that respondents experienced severe pain ($M = 7.42$, $SD = 2.21$) and reported moderate quality of life across physical, psychological, social, and environmental domains. Pain severity exhibited significant negative correlations with psychological ($r = -0.618$, $p < 0.05$) and environmental ($r = -0.503$, $p < 0.05$) domains. Similarly, self-care deficits were significantly associated with reduced quality of life in psychological ($r = -0.581$, $p < 0.05$) and environmental ($r = -0.412$, $p < 0.05$) domains, whereas pain frequency did not show significant relationships with quality-of-life outcomes. These findings underscore the critical influence of pain intensity and self-care capacity on quality-of-life outcomes among individuals with TN. The study highlights the necessity of integrated, patient-centered interventions focusing on effective pain management, enhancement of self-care practices, and psychosocial support to optimize health outcomes. The results contribute valuable evidence for culturally appropriate nursing interventions and inform clinical practice strategies aimed at improving the well-being of Filipino adults living with TN.

Keywords: Trigeminal neuralgia; Filipino adults; neuropathic pain; quality of life; pain severity; self-care deficit; WHOQOL-BREF; nursing intervention; chronic pain management

Introduction

Trigeminal neuralgia (TN) is considered a rare but severe chronic neuropathic pain condition that significantly affects patients’ daily functioning and overall well-being. Despite its debilitating nature, there is limited local research in the Philippines examining how pain severity and self-care deficits influence the quality of life of affected individuals. This gap highlights the need for further investigation to guide effective nursing interventions and improve patient outcomes.

Trigeminal neuralgia is characterized by sudden and severe facial pain affecting the trigeminal nerve. The pain is often described as electric shock-like and may occur unexpectedly during routine activities such as eating, speaking, or brushing the teeth. Because of its intensity and unpredictability, trigeminal neuralgia can significantly interfere with daily functioning and overall well-being.

Chronic pain conditions such as trigeminal neuralgia can negatively affect an individual’s physical, psychological, and social functioning. Patients frequently report difficulty performing basic activities of daily

living due to pain triggers, which may lead to emotional distress, anxiety, and reduced social interaction. As a result, quality of life becomes an important indicator in assessing the overall impact of this condition.

Quality of life refers to an individual's perception of their position in life within the context of their culture, value systems, goals, expectations, and concerns. In healthcare research, it is commonly used to evaluate the effects of chronic diseases on patients' daily lives and well-being. Individuals living with trigeminal neuralgia often experience limitations in physical functioning, emotional well-being, and social participation.

This study examined the quality of life among selected Filipino adults diagnosed with trigeminal neuralgia. It also investigated the relationship between pain severity, self-care deficits, and quality of life outcomes to provide insights that may support the development of nursing interventions and patient-centered care strategies.

Research Questions

This study aimed to examine the quality of life among Filipino adults diagnosed with trigeminal neuralgia.

Specifically, the study sought to answer the following questions:

1. What are the demographic characteristics of the respondents in terms of age, sex, and civil status?
2. What is the level of pain severity experienced by Filipino adults with trigeminal neuralgia?
3. What is the level of quality of life of respondents in terms of physical, psychological, social, and environmental domains?
4. Is there a significant relationship between pain severity, self-care deficits, and quality of life among Filipino adults with trigeminal neuralgia?

Scope and Delimitation of the Study

This study assessed the quality of life among selected Filipino adults diagnosed with trigeminal neuralgia. The study focused on examining the relationship between pain severity, self-care practices, and quality of life outcomes. Respondents included Filipino adults aged 30 years and above who reported having trigeminal neuralgia. Data were collected through an online survey administered using Google Forms. The questionnaire included demographic information, a Numeric Rating Scale for pain severity, a self-care checklist based on Orem's Self-Care Deficit Nursing Theory, and the WHOQOL-BREF instrument used to assess quality of life. The study was limited to respondents who were members of an online trigeminal neuralgia support community in the Philippines. The findings of the study were based on self-reported responses and may not represent all individuals diagnosed with trigeminal neuralgia in the country.

Literature Review

Trigeminal neuralgia (TN) is widely recognized as one of the most severe forms of neuropathic pain disorders, characterized by sudden, recurrent, and intense facial pain along the trigeminal nerve distribution. Clinical and epidemiological studies describe TN pain as electric shock-like, often triggered by routine activities such as eating, speaking, or oral hygiene practices, significantly impairing daily functioning (Cruccu et al., 2020; Zakrzewska & Linskey, 2014). Advances in neurobiological research further indicate that TN is associated with vascular compression, demyelination, and abnormal neuronal excitability, contributing to its chronic and debilitating nature (Chen et al., 2022; Gambeta et al., 2020).

Chronic pain conditions, including TN, have been consistently linked to diminished quality of life (QoL) across multiple domains. The multidimensional impact of TN extends beyond physical discomfort to include psychological distress, reduced social interaction, and impaired functional independence (Lambriu et al., 2021; Jacques et al., 2022). Empirical evidence suggests that patients with TN frequently experience anxiety, depression, and social withdrawal due to the unpredictability and severity of pain episodes, which collectively contribute to poorer QoL outcomes (Singhota et al., 2022; Villegas Díaz et al., 2024). The World Health Organization conceptualizes quality of life as an individual's perception of their position in life within cultural and contextual systems, highlighting the importance of assessing both subjective and objective health outcomes (World Health Organization, 1996; Skevington et al., 2004).

Pain severity has been identified as a critical determinant of QoL in individuals with neuropathic conditions. Studies indicate that higher pain intensity is significantly associated with decreased physical functioning, psychological well-being, and environmental satisfaction (Akoglu, 2018; Xu et al., 2021). However, emerging evidence suggests that pain frequency alone may not fully explain QoL variations, emphasizing the need to examine additional factors such as coping mechanisms and self-care behaviors (Evensen & Hunnskaar, 2020).

The theoretical foundation of this study is anchored in Dorothea Orem's Self-Care Deficit Nursing Theory, which posits that individuals require nursing support when they are unable to meet their self-care requisites due to health limitations (Orem, 2001). In the context of TN, persistent and severe facial pain may hinder individuals' ability to perform essential self-care activities, including nutrition, hygiene, and medication adherence. This limitation may exacerbate physical discomfort and contribute to psychological

distress, ultimately leading to reduced quality of life. Empirical studies support the notion that deficits in self-care are significantly associated with poorer health outcomes and diminished well-being among patients with chronic illnesses (Polit & Beck, 2021).

Furthermore, literature highlights the effectiveness of integrated interventions in improving QoL among individuals with TN and other chronic pain conditions. Multidisciplinary approaches—including pharmacological treatment, nerve block procedures, patient education, and psychosocial support—have been shown to reduce pain intensity and enhance functional outcomes (Hong et al., 2025; Jacques et al., 2022). In addition, self-care education and patient empowerment strategies play a crucial role in promoting adaptive coping mechanisms and improving overall well-being (Gray et al., 2017).

Despite the growing body of international literature, there remains a scarcity of localized studies examining the interplay between pain severity, self-care deficits, and quality of life among Filipino individuals with TN. This gap underscores the need for context-specific research to inform culturally appropriate nursing interventions and healthcare strategies. Addressing this gap is essential for advancing evidence-based practice and improving patient-centered care within the Philippine healthcare system.

Methodology

Research Design

This study employed a quantitative cross-sectional descriptive-correlational research design to examine the relationship between pain severity, self-care deficits, and quality of life among Filipino adults diagnosed with trigeminal neuralgia.

Sampling Design

The study utilized a non-probability sampling method. Participants were recruited through an online trigeminal neuralgia support group community in the Philippines. A total of 26 respondents who met the inclusion criteria voluntarily participated in the study.

Research Locale

The study was conducted in the Philippines through an online survey platform. Data were collected using Google Forms and distributed to members of an online trigeminal neuralgia support group. This approach allowed the researcher to gather responses from individuals diagnosed with trigeminal neuralgia across different regions in the country.

Research Participants

The research participants of this study consisted of Filipino adults diagnosed with trigeminal neuralgia. A total of twenty-six (26) respondents participated in the study. The respondents were individuals aged 30 years and above who reported having trigeminal neuralgia and were members of an online trigeminal neuralgia support group community in the Philippines. The participants voluntarily took part in the study and completed the online survey questionnaire. The selected respondents provided relevant information regarding their pain experiences, self-care practices, and quality of life.

Research Instrument

The research utilized a structured online survey questionnaire to collect data from the respondents. The questionnaire consisted of four main sections. The first section gathered demographic information such as age, sex, civil status, educational attainment, income level, and employment status. The second section measured pain severity using the Numeric Rating Scale (NRS), where respondents rated their pain intensity on a scale from 0 to 10. The third section included a self-care checklist based on Dorothea Orem's Self-Care Deficit Nursing Theory to assess self-care practices among individuals with trigeminal neuralgia. The fourth section utilized the WHOQOL-BREF questionnaire to evaluate the respondents' quality of life in terms of physical, psychological, social, and environmental domains.

Data Gathering Procedure

This study used an online survey to collect data from the respondents. The questionnaire was distributed through Google Forms to members of an online trigeminal neuralgia support group community in the Philippines. Prior to answering the questionnaire, the respondents were provided with an informed consent form explaining the purpose of the study and assuring them of the confidentiality of their responses. Participants were asked to voluntarily complete the survey questionnaire. After the responses were collected, the data were organized, tabulated, and analyzed using appropriate statistical methods to determine the relationship between pain severity, self-care deficits, and quality of life among the respondents.

Results and Discussions

Problem 1: What are the demographic characteristics of the respondents in terms of age, sex, civil status?

Table 1 presents the demographic characteristics of the respondents in terms of age, sex, and civil status.

Variable	Category	Frequency (f)	Percentage (%)
Age	30–39 years old	2	7.7
	40–49 years old	7	26.9
	50–59 years old	10	38.5
	60 years old and above	7	26.9
Sex	Male	4	15.4
	Female	22	84.6
Civil Status	Married	18	69.2
	Widowed	4	15.4
	Separated	4	15.4

Table 1 presents the demographic profile of the respondents in terms of age, sex, and civil status, providing an essential context for understanding the distribution of trigeminal neuralgia (TN) within the sample population. The age distribution indicates that the largest proportion of respondents belonged to the 50–59 age group (38.5%), followed by those aged 40–49 years and 60 years and above, each comprising 26.9% of the sample. In contrast, only a small proportion (7.7%) were within the 30–39 age range. This pattern suggests that TN is more prevalent among middle-aged and older adults, which aligns with existing epidemiological evidence indicating that the incidence of TN increases with age due to progressive neurovascular changes and degenerative processes affecting the trigeminal nerve. The relatively low representation of younger adults further supports the characterization of TN as a condition that typically manifests later in life. In terms of sex distribution, the findings reveal a marked predominance of female respondents (84.6%) compared to males (15.4%). This disproportion is consistent with prior studies reporting a higher prevalence of TN among women. Such differences have been attributed to a combination of biological, hormonal, and psychosocial factors, including sex-related variations in pain perception, hormonal influences on neural sensitivity, and differences in healthcare utilization patterns. The observed trend reinforces the need for gender-sensitive approaches in the assessment and management of TN. With respect to civil status, the majority of respondents were married (69.2%), while widowed and separated individuals each accounted for 15.4% of the sample. This distribution may reflect the likelihood that individuals diagnosed with TN are often in established family roles, which can influence both the experience and management of chronic pain. Being married may provide access to social and emotional support systems that can mitigate the psychological burden of the condition; however, it may also introduce additional role-related responsibilities that could complicate coping mechanisms. Conversely, individuals who are widowed or separated may experience varying levels of social support, which can further affect their quality of life and health outcomes. It is important to note that although additional demographic variables such as educational attainment, income, and employment status were initially considered, only age, sex, and civil status were included in the analysis due to data completeness and relevance. While these variables offer valuable baseline insights, the exclusion of socioeconomic indicators may limit a more comprehensive understanding of the broader social determinants influencing the experience of TN. Overall, the demographic profile highlights key population characteristics associated with trigeminal neuralgia and provides a foundational basis for interpreting subsequent findings related to pain severity, self-care practices, and quality of life outcomes.

Problem 2: What is the level of pain severity experienced by Filipino adults with trigeminal neuralgia?

Table 2. Level of Pain Severity Among Respondents

Pain Severity Assessment	Mean	Standard Deviation	Interpretation
Worst facial pain in the past 7 days	7.42	2.21	Severe Pain
Overall Mean	7.42	2.21	Severe Pain

Table 2 presents the level of pain severity experienced by the respondents, measured using the Numeric Rating Scale (NRS). The results indicate a high level of pain intensity, with a mean score of 7.42 (SD = 2.21), which is interpreted as severe pain. This finding underscores the debilitating nature of trigeminal neuralgia (TN), reinforcing its classification as one of the most painful neuropathic conditions. The consistently elevated pain scores reported by respondents suggest that TN imposes a substantial burden on individuals, significantly impairing their physical functioning and daily activities. Pain of this magnitude is likely to interfere with essential tasks such as eating, speaking, and maintaining oral hygiene, thereby reducing overall functional independence. The relatively moderate standard deviation (SD = 2.21) further indicates some variability in pain experiences among respondents; however, the overall trend remains within

the severe range, highlighting the persistent and pervasive nature of TN-related pain. This variability may reflect differences in individual pain thresholds, disease progression, access to treatment, and coping mechanisms. From a clinical and psychosocial perspective, severe pain is strongly associated with adverse outcomes, including heightened emotional distress, anxiety, and reduced quality of life. Chronic exposure to intense pain stimuli may also contribute to cognitive and behavioral changes, further compounding the burden of the condition. These findings are consistent with existing literature emphasizing that pain intensity—rather than frequency—is a critical determinant of functional limitation and psychological well-being in patients with neuropathic disorders. Overall, the results of Table 2 highlight the urgent need for effective and sustained pain management strategies. Addressing high pain severity through pharmacological, interventional, and supportive approaches is essential to improving patient outcomes, enhancing daily functioning, and mitigating the broader impact of trigeminal neuralgia on quality of life.

Problem 3: What is the level of quality of life of respondents in terms of physical, psychological, social, and environmental domains?

Table 3. Quality of Life of Respondents According to WHOQOL-BREF Domains

Domain	Mean Score	Transformed Score	Interpretation
Physical	20.16	46.98	Moderate
Psychological	16.62	44.25	Moderate
Social Relationships	8.30	44.17	Moderate
Environmental	21.81	43.16	Moderate

Table 3 presents the quality of life (QoL) of respondents across the four domains of the WHOQOL-BREF: physical, psychological, social relationships, and environmental. The results indicate that respondents reported a moderate level of quality of life across all domains, with transformed scores ranging from 43.16 to 46.98. Among the domains, the physical domain yielded the highest transformed score (46.98), followed by the psychological (44.25) and social relationships (44.17) domains, while the environmental domain recorded the lowest score (43.16). Although all domains fall within the moderate range, the relatively lower scores in the psychological and environmental dimensions suggest greater vulnerability in these areas. This pattern indicates that while respondents maintain a certain level of functional adaptation, they continue to experience notable constraints in mental well-being and access to supportive environmental resources. The moderate QoL ratings, despite the presence of severe pain (as indicated in Table 2), suggest the potential role of adaptive coping mechanisms and resilience among respondents. Individuals living with chronic conditions such as trigeminal neuralgia (TN) may gradually develop behavioral and cognitive strategies to manage pain and sustain daily functioning. However, the persistence of only moderate QoL levels implies that such adaptations may be insufficient to fully offset the multidimensional burden of the condition. Notably, the physical domain, although relatively higher, still reflects limitations in energy, mobility, and the ability to perform activities of daily living due to recurrent pain episodes. The psychological domain highlights the impact of TN on emotional well-being, including increased susceptibility to anxiety, distress, and reduced life satisfaction. Similarly, the social relationships domain suggests potential disruptions in interpersonal interactions and social participation, likely influenced by the unpredictability of pain attacks. The environmental domain, which encompasses access to healthcare, financial resources, and physical safety, indicates that external support systems may not be fully adequate in addressing the needs of individuals with TN. Overall, the findings demonstrate that while respondents exhibit a degree of adjustment to their condition, trigeminal neuralgia continues to exert a substantial and multidimensional impact on their quality of life. These results emphasize the importance of comprehensive, patient-centered interventions that address not only pain management but also psychological support, social integration, and environmental resource accessibility to achieve meaningful improvements in overall well-being.

Problem 4: Is there a significant relationship between pain severity, self-care deficits, and quality of life among Filipino adults with trigeminal neuralgia?

Table 4. Relationship Between Pain Severity, Pain Frequency, Self-Care Practices and WHOQOL-BREF Domains.

Variable	Physical	Psychological	Social	Environmental
Pain Severity (Spearman's r)	-0.076	-0.618*	-0.330	-0.503*
Pain Frequency (Spearman's r)	-0.226	-0.280	-0.228	-0.217
Self-Care Practices (Pearson's r)	-0.035	-0.581*	-0.165	-0.412*

Table 4 presents the relationships between pain severity, pain frequency, self-care practices, and the four domains of quality of life as measured by the WHOQOL-BREF. The analysis reveals distinct patterns in how these variables interact to influence the overall well-being of individuals with trigeminal neuralgia (TN). Pain severity demonstrated statistically significant negative correlations with the psychological domain ($r = -0.618, p < 0.05$) and the environmental domain ($r = -0.503, p < 0.05$). These findings indicate that higher levels of pain intensity are strongly associated with poorer psychological well-being and reduced satisfaction with environmental conditions, including access to healthcare, financial resources, and safety. The relatively stronger correlation observed in the psychological domain suggests that pain intensity exerts a pronounced impact on emotional health, potentially contributing to increased anxiety, distress, and decreased life satisfaction. This underscores the central role of pain perception in shaping not only physical experiences but also cognitive and emotional outcomes among individuals with TN. In contrast, pain severity exhibited weak and non-significant relationships with the physical ($r = -0.076$) and social ($r = -0.330$) domains. While negative in direction, these associations suggest that factors beyond pain intensity—such as coping strategies, social support, and adaptive behaviors—may mediate the effects of TN on physical functioning and social interaction. Pain frequency, on the other hand, showed consistently weak and non-significant correlations across all domains of quality of life. This finding suggests that the intensity of pain episodes, rather than their frequency, is a more critical determinant of diminished quality of life. It implies that even infrequent episodes of severe pain may be sufficient to disrupt psychological stability and environmental satisfaction, reinforcing the need to prioritize pain intensity management in clinical interventions. Furthermore, self-care practices demonstrated significant negative correlations with the psychological domain ($r = -0.581, p < 0.05$) and the environmental domain ($r = -0.412, p < 0.05$). These results indicate that individuals with greater self-care deficits tend to experience poorer psychological well-being and reduced environmental quality of life. The strength and direction of these relationships highlight the critical role of self-care capacity in maintaining overall health and well-being. Difficulties in performing essential self-care activities may exacerbate emotional distress, reduce autonomy, and limit engagement with supportive environments. These findings provide empirical support for Orem's Self-Care Deficit Nursing Theory, which posits that an individual's inability to perform self-care activities necessitates nursing intervention and is associated with compromised health outcomes. In the context of TN, persistent pain may hinder self-care behaviors, thereby creating a cyclical relationship between physical discomfort, reduced self-care capacity, and declining quality of life. Overall, the results of Table 4 emphasize that pain severity and self-care deficits are key determinants of quality of life, particularly within the psychological and environmental domains. The absence of significant relationships with pain frequency further refines the understanding of TN, highlighting the importance of targeting pain intensity and enhancing self-care abilities in intervention strategies. These findings underscore the need for comprehensive, multidisciplinary approaches that integrate effective pain management, patient education, and psychosocial support to improve outcomes for individuals living with trigeminal neuralgia.

Ethical Considerations

This study followed ethical guidelines in conducting research involving human participants. Participation in the study was voluntary, and respondents were informed about the purpose of the research before completing the questionnaire. An informed consent form was provided to all participants through the online survey. Respondents were assured that their responses would remain confidential and anonymous. No personal identifying information was collected from the participants, and the data gathered were used solely for academic and research purposes. Participants were also informed that they had the right to withdraw from the study at any time without any negative consequences.

Conclusion

This study examined the quality of life among Filipino adults diagnosed with trigeminal neuralgia and explored the relationship between pain severity, pain frequency, self-care deficits, and quality-of-life outcomes. Findings revealed that respondents experienced severe pain and a moderate level of quality of life across the WHOQOL-BREF domains. Pain severity showed significant inverse relationships with the psychological and environmental domains, indicating that higher pain levels are associated with poorer quality of life. Similarly, increased self-care deficits were significantly associated with reduced quality of life in these domains. These results suggest that trigeminal neuralgia negatively impacts the overall well-being of affected individuals and highlight the need for comprehensive pain management and strengthened self-care support interventions.

Recommendations

Healthcare providers should strengthen pain management strategies and promote effective self-care practices among individuals with trigeminal neuralgia through targeted education and patient-centered interventions. Emphasis should be placed on addressing psychological and environmental challenges associated with chronic facial pain. Additionally, support groups and community-based programs may enhance coping mechanisms and improve overall quality of life. Future research should involve larger and more diverse populations to increase generalizability and further explore factors influencing quality of life among individuals with trigeminal neuralgia.

References

- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine*, 18(3), 91–93. <https://doi.org/10.1016/j.tjem.2018.08.001>
- Bitanga, E. S., Baroque, A. C., Santos-Ocampo, A. S., Guevarra, A. Y., Querijero, M. B., & Chua, C. L. (2002). Safety, tolerability, and efficacy of gabapentin in neuropathic pain: Results of a post-marketing surveillance study in 1,214 Filipino patients. *Neurology Journal of Southeast Asia*, 7, 25–34.
- Brownlee, C. (2022, December). Taking a deeper look at trigeminal neuralgia. *Johns Hopkins Medicine*. <https://www.hopkinsmedicine.org/news/articles/2022/12/taking-a-deeper-look-at-trigeminal-neuralgia>
- Chen, Q., Yi, D., Perez, J. N. J., Liu, M., Chang, S. D., Barad, M. J., Lim, M., & Qian, X. (2022). The molecular basis and pathophysiology of trigeminal neuralgia. *International Journal of Molecular Sciences*, 23(7), 3604. <https://doi.org/10.3390/ijms23073604>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Cruccu, G., Finnerup, N. B., Jensen, T. S., Scholz, J., Sindou, M., Svensson, P., & Zakrzewska, J. M. (2020). Trigeminal neuralgia: New classification and diagnostic grading for practice and research. *Pain*, 161(1), 190–193. <https://doi.org/10.1097/j.pain.0000000000001710>
- Evensen, A. E., & Hunskaar, S. (2020). Qualitative and quantitative research using digital survey tools in public health. *Scandinavian Journal of Public Health*, 48(6), 635–640. <https://doi.org/10.1177/1403494820911444>
- Evans, J. D. (1996). *Straightforward statistics for the behavioral sciences*. Brooks/Cole Publishing.
- Gambeta, E., Chichorro, J. G., & Zamponi, G. W. (2020). Trigeminal neuralgia: An overview from pathophysiology to pharmacological treatments. *Molecular Pain*, 16, 1744806920901890. <https://doi.org/10.1177/1744806920901890>
- Gray, J. R., Grove, S. K., & Sutherland, S. (2017). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (8th ed.). Elsevier.
- Headache Classification Committee of the International Headache Society. (2018). The international classification of headache disorders (3rd ed.). *Cephalalgia*, 38(1), 1–211. <https://doi.org/10.1177/0333102417738202>
- Hong, J. H., Lee, S. W., & Park, J. H. (2025). Comparison of clinical outcomes of trigeminal nerve block with and without radiofrequency thermocoagulation for trigeminal neuralgia. *Pain Physician*, 28(3), 241–248.
- Jacques, N., Karoutsos, S., Marais, L., & Nathan-Denizot, N. (2022). Quality of life after trigeminal nerve block in refractory trigeminal neuralgia: A retrospective cohort study and literature review. *Journal of International Medical Research*, 50(10). <https://doi.org/10.1177/03000605221132027>
- Khan, J., Rizvi, S. J., & Shah, M. (2017). Trigeminal neuralgia, glossopharyngeal neuralgia, and myofascial pain dysfunction syndrome. *Pain Research and Management*, 2017, 7324306. <https://doi.org/10.1155/2017/7324306>

- Lamburu, G., Zakrzewska, J. M., & Matharu, M. S. (2021). Trigeminal neuralgia: A practical guide. *Practical Neurology*, 21(5), 392–402. <https://doi.org/10.1136/practneurol-2020-002678>
- Liu, H., Li, F., Zhang, Y., & Zhang, J. (2022). Structural and functional brain changes in patients with classic trigeminal neuralgia: A multimodal MRI study. *Frontiers in Neuroscience*, 16, 930765. <https://doi.org/10.3389/fnins.2022.930765>
- Mattos, D. S., Silva, L. S., Silva, F. V., & Dantas, R. A. S. (2020). Google Forms as a data collection tool in healthcare research: Advantages and limitations. *Revista Brasileira de Enfermagem*, 73(1), e20200023. <https://doi.org/10.1590/0034-7167-2020-0023>
- Mukaka, M. M. (2012). A guide to appropriate use of the correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69–71.
- Munro, B. H. (2005). *Statistical methods for health care research* (5th ed.). Lippincott Williams & Wilkins.
- Orem, D. E. (2001). *Nursing: Concepts of practice* (6th ed.). Mosby.
- Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS* (7th ed.). Routledge.
- Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Reyes, E., Estrella, R., Sy, M., Sia, I. T., & Ramirez, L. (2010). The PQ neuropathic pain questionnaire in English and Filipino. *Acta Medica Philippina*, 44(3), 10–16.
- Singhota, S., Rizvi, S., & Zakrzewska, J. M. (2022). Long-term evaluation of a multidisciplinary trigeminal neuralgia service. *The Journal of Headache and Pain*, 23(1), 89. <https://doi.org/10.1186/s10194-022-01489-7>
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. *Quality of Life Research*, 13(2), 299–310.
- Villegas Díaz, M. A., Guerra Sierra, B. E., Pérez-Soto, R. H., Díaz Pineda, M., & Piñeiro-Ramos, J. D. (2024). Trigeminal neuralgia: Therapeutic strategies to restore quality of life. *Journal of Oral & Facial Pain and Headache*, 38(1), 13–20. <https://doi.org/10.11607/ofph.3187>
- World Health Organization. (1996). *WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment*. World Health Organization.
- Xu, Y., Xie, Q., & Jackson, C. (2021). Trigeminal neuralgia: Current approaches and emerging interventions. *Journal of Pain Research*, 14, 1441–1456. <https://doi.org/10.2147/JPR.S291291>
- Yu, G. L. T., & Rosales, R. L. (2018). Filipino version of the Penn Facial Pain Scale: Phase 1 validation study. *Acta Medica Philippina*, 52(2), 143–149. <https://doi.org/10.47895/amp.v52i2.1120>
- Zakrzewska, J. M., & Linskey, M. E. (2014). Trigeminal neuralgia. *BMJ*, 348, g474. <https://doi.org/10.1136/bmj.g474>
- Zhu, J., Yu, H., Shi, L., & Xu, J. (2022). Global trends and hotspots in trigeminal neuralgia research from 2001 to 2021: A bibliometric analysis. *Frontiers in Neurology*, 13, 894006. <https://doi.org/10.3389/fneur.2022.894006>