# Reliability and Responsiveness Drive Patient Satisfaction Among National Health-Insurance Users at a Primary Health-Care Center

**Nur Masdalifah[1], Eka SR. Sihombing[1], Sondang Sidabutar[1], Peterson Yosua Silaen[1], Arfyah Sagita Yunanda[1], Inri Monika[1]**
[1]Faculty of Health, Universitas Efarina, Pematangsiantar, Indonesia
Correspondence**: Arfyah Sagita Yunanda:** Jl. Sudirman No. 1, Pematangsiantar, Sumatera Utara, Indonesia; arfiah@gmail.com

## ABSTRACT
Patient satisfaction is a critical indicator of service quality in primary health-care settings and plays an essential role in strengthening the effectiveness of the national health-insurance program. Physical facilities, service reliability, staff responsiveness, and professional assurance are widely recognized as core determinants of patient experience. This study was conducted to analyze the level of satisfaction among national health-insurance users at the Bane Primary Health-Care Center in Pematangsiantar in 2024 across four dimensions of service quality. The study employed a quantitative cross-sectional design involving 98 respondents selected using the Slovin formula. Data were collected through structured questionnaires and analyzed descriptively. The results show varying levels of satisfaction across the four dimensions. Satisfaction was highest for reliability (70.4%) and responsiveness (65.8%), indicating that patients generally perceived the services as accurate, consistent, and delivered with adequate promptness. Tangible aspects also contributed positively, with 61.2% of patients expressing satisfaction, although limitations in physical facilities and equipment remained evident. Assurance demonstrated the lowest satisfaction level (47.1%), reflecting concerns about staff competence, communication clarity, and the ability to instill confidence. In conclusion, the findings highlight the need to strengthen physical infrastructure and enhance professional assurance while maintaining reliable and responsive service delivery. Improving these dimensions may contribute to higher patient satisfaction and support the overall effectiveness of the national health-insurance system.
**Keywords:** patient satisfaction; tangible; reliability; responsiveness; assurance; primary health care

## INTRODUCTION
The overall health status of a population is fundamentally shaped by the availability, accessibility, and quality of health-care facilities within a country [1]. In contemporary public-health discourse, patient satisfaction represents a multidimensional construct that extends far beyond the technical quality of clinical services [2-4]. Patient satisfaction is influenced by a constellation of interrelated factors, including the quality of communication delivered by nurses and physicians, the clarity of information regarding medications, the responsiveness of health-care staff, the effectiveness of pain management, the cleanliness and comfort of the hospital environment, the adequacy of discharge information, and even the institutional reputation of the health-care facility [5]. These components collectively shape patients' perceptions and determine whether health-care services are experienced as trustworthy, humane, and reliable [6-10].

Recent global monitoring reports issued by the World Health Organization indicate that Indonesia has achieved notable progress while simultaneously facing persistent challenges in its health-care sector. The Global Monitoring Report on Universal Health Coverage in 2023 shows that although Indonesia's overall service coverage has improved, the national index for service coverage declined slightly, from fifty-six essential services in 2019 to fifty-five services in 2021. This fluctuation underscores the ongoing need for strengthening primary-care delivery, ensuring equitable access, and improving service quality across diverse regions of the country [11]. Primary health-care centers are mandated to deliver services that meet professional standards and uphold patient dignity. When patients perceive health-care workers as unfriendly, inattentive, or emotionally reactive, these negative experiences can generate discomfort and erode trust. Over time, such perceptions may discourage patients from returning to the same primary health-care center, thereby diminishing service utilization and weakening the role of primary care as the frontline of community health [12].

National data from the Ministry of Health of the Republic of Indonesia illustrate the importance of patient satisfaction as a performance indicator. In 2022, the satisfaction level among patients enrolled in the national health-insurance program reached 81.5 percent. This figure reflects evaluations of multiple service dimensions, including accessibility, the quality of medical care, the attitudes of health-care personnel, and the adequacy of supporting facilities. However, earlier reports from the Ministry of Health in 2015 documented persistent complaints regarding nurse–patient communication. Across several hospitals in Indonesia, approximately sixty-seven percent of patients expressed dissatisfaction with the health-care services they received. Such findings highlight systemic gaps in interpersonal communication, service responsiveness, and patient-centered care [13].

Low levels of patient satisfaction have significant implications for the sustainability and development of both hospitals and primary-care centers. Patients who feel dissatisfied with the services they receive often choose to seek care elsewhere, preferring facilities that they perceive as more competent, responsive, or comfortable. This behavioral shift can reduce patient visits, weaken institutional credibility, and hinder efforts to improve community health outcomes [14].

A preliminary survey conducted by the researcher at the Bane Primary-Care Center in Pematangsiantar in 2024 further illustrates these challenges. Data from the Bane Primary-Care Center for 2023 show that twenty percent of patients enrolled in the national health-insurance program reported dissatisfaction with several aspects of service delivery, including the availability of medications, waiting times, and the adequacy of medical equipment. These concerns indicate that improvements are urgently needed to enhance patient satisfaction and ensure that primary-care services meet community expectations.

The findings also reveal broader structural issues within the Bane Primary-Care Center. The quality of service provided by health-care personnel remains suboptimal, partly due to limited human resources. In addition, the center lacks essential medical equipment required to deliver comprehensive care, and the number of examination rooms is insufficient to accommodate patient volume. These conditions collectively suggest that significant gaps persist in the delivery of health-care services, particularly for patients enrolled in the national health-insurance program. Addressing these gaps is essential for improving patient satisfaction, strengthening service utilization, and ensuring that primary-care centers fulfill their role as accessible and reliable health-care providers for the community.

## METHODS

The study was conducted at the Bane Primary Health-Care Center in Pematangsiantar, North Sumatra. Data collection took place during May and July 2024, a period that allowed stable patient flow and facilitated systematic recruitment of respondents. The setting represents a primary health-care facility serving a large population of national health-insurance users, making it an appropriate location for examining patient satisfaction. This research employed a descriptive quantitative design aimed at portraying the current level of patient satisfaction across multiple service-quality dimensions [15-17]. The descriptive approach was selected to capture actual conditions and ongoing phenomena [18] experienced by patients during their visits to the health-care center.

The study population consisted of all national health-insurance patients who sought treatment at the facility in 2024, totaling 4,018 individuals. Using the Slovin formula, a sample of 98 respondents was obtained. Participants were recruited through accidental sampling, in which patients who met the inclusion criteria and visited the center during the data-collection period were invited to participate.

The study examined four key variables representing the dimensions of patient satisfaction: tangible, reliability, responsiveness, and assurance. These variables reflect physical facilities, consistency of service delivery, promptness and clarity of staff responses, and the ability of health-care personnel to instill confidence in patients. All variables were measured using a structured questionnaire consisting of closed-ended items designed to capture patient perceptions in a standardized manner. Respondents indicated their level of satisfaction using numerical scales, enabling the transformation of subjective experiences into quantifiable data.

Data analysis was conducted using descriptive statistical techniques. Frequencies and percentages were generated to summarize respondent characteristics and satisfaction levels across the four dimensions [19-21]. The descriptive approach provided a clear overview of patient experiences and highlighted patterns that reflect strengths and weaknesses in service delivery at the primary-care center.

## RESULTS

The findings of this study reveal distinct patterns in patient satisfaction across the four dimensions of service quality. In the tangible dimension, most patients expressed satisfaction with the physical environment of the health-care facility. Cleanliness, adequate equipment, and comfortable surroundings contributed positively to their experiences. However, a considerable proportion of patients still perceived shortcomings in the availability of medical tools and facility infrastructure, indicating that improvements in physical resources remain essential.

Table 1. Distribution of patient satisfaction by service quality dimension

| Dimension | Category | Percentage | Interpretation |
|---|---|---|---|
| Tangible | Satisfied | 61.2 | Patients perceived the physical facilities, equipment, and cleanliness as adequate. |
| | Not satisfied | 38.8 | Dissatisfaction was associated with limited equipment, insufficient facilities, and environmental discomfort. |
| Reliability | Satisfied | 70.4 | Services were viewed as consistent, accurate, and timely. |
| | Not satisfied | 29.6 | Dissatisfaction stemmed from delays, inaccuracies, or inconsistent service delivery. |
| Responsiveness | Satisfied | 65.8 | Patients appreciated prompt assistance and clear communication. |
| | Not satisfied | 34.2 | Dissatisfaction reflected slow responses and unclear information. |
| Assurance | Satisfied | 47.1 | Patients felt reasonably confident in staff competence and professionalism. |
| | Not satisfied | 52.9 | Dissatisfaction was linked to concerns about staff knowledge, communication, and certainty of care. |

The reliability dimension demonstrated the highest level of satisfaction among all categories. Patients generally felt that services were delivered accurately, consistently, and within an acceptable timeframe. This suggests that the operational routines and clinical procedures at the primary-care center are functioning effectively. Nevertheless, nearly one-third of respondents reported dissatisfaction, primarily due to delays or inconsistencies in service delivery. These concerns highlight the need for continuous monitoring of workflow efficiency and staff performance.

Responsiveness also emerged as a strong contributor to patient satisfaction. Many respondents appreciated the willingness of health-care personnel to assist promptly and provide clear information. Effective communication and timely responses appear to play a crucial role in shaping positive patient experiences. Despite this, more than one-third of patients felt that the responsiveness of staff did not meet their expectations, particularly in situations requiring detailed explanations or rapid action. This indicates that communication training and service-flow optimization may further enhance patient perceptions.

The assurance dimension presented the most challenging results. Satisfaction levels were lower compared to other dimensions, and more than half of the respondents expressed dissatisfaction. This suggests that many patients were uncertain about the competence, professionalism, or communication abilities of the health-care staff. Assurance is closely tied to trust, and the findings imply that patients may require clearer explanations, stronger interpersonal engagement, and more visible demonstrations of professional confidence. Strengthening staff knowledge, communication skills, and patient-centered behaviors may help improve perceptions in this dimension.

Overall, the results indicate that while the primary-care center performs well in several aspects of service quality, particularly reliability and responsiveness there are notable gaps in tangible resources and assurance. Addressing these gaps may significantly enhance patient satisfaction and contribute to better health-care experiences for national health-insurance users.

## DISCUSSION

The findings of this study provide important insights into how different dimensions of service quality shape patient satisfaction among national health-insurance users at the Bane Primary Health-Care Center. By examining tangible, reliability, responsiveness, and assurance, the analysis highlights both strengths and areas requiring improvement within the facility's service delivery.

### Tangible

The tangible dimension, which encompasses physical facilities, equipment availability, cleanliness, and the overall physical environment, showed that 61.2% of patients were satisfied, while 38.8% expressed dissatisfaction. This distribution suggests that although a majority of patients perceived the physical aspects of the health-care center as adequate, a substantial proportion still encountered limitations in facility readiness and equipment sufficiency.

These findings align with the theoretical perspective that tangible elements serve as visible indicators of service quality. As described in previous literature, patients often evaluate the credibility and professionalism of a health-care provider based on the condition of its physical infrastructure, the availability of medical tools, and the cleanliness of the environment. When these elements are lacking, such as insufficient medical equipment, inadequate examination rooms, or discomfort in waiting areas patients may experience anxiety or doubt regarding the effectiveness of the care they receive. This is consistent with the argument who emphasize that deficiencies in physical resources can diminish patient trust even when technical care is delivered competently [2].

The significant association found in this study reinforces the importance of strengthening physical facilities to enhance patient satisfaction. Improvements in equipment availability, environmental cleanliness, and spatial comfort may contribute to greater patient confidence and support the broader goals of the national health-insurance program. Interestingly, the results differ from those reported by Maulina et al. (2019), who found no relationship between tangible factors and patient satisfaction in another primary-care setting. This discrepancy may reflect contextual differences in facility conditions, patient expectations, or resource availability across regions.

### Reliability

Reliability emerged as the strongest dimension, with 70.4% of patients reporting satisfaction and 29.6% expressing dissatisfaction. This indicates that most patients perceived the services as consistent, accurate, and delivered in a timely manner. Reliability is a core component of service quality, reflecting the ability of health-care providers to fulfill promises, maintain accuracy, and ensure equitable treatment for all patients.

The high satisfaction level suggests that the Bane Primary Health-Care Center has established operational routines that meet patient expectations. Patients likely experienced predictable service processes, timely examinations, and accurate medical information, all of which contribute to a sense of trust and dependability. However, the nearly one-third of patients who reported dissatisfaction highlight areas where delays, inconsistencies, or inaccuracies may still occur.

The literature supports the notion that reliability is closely linked to patient satisfaction. Reliable services foster trust and encourage continued utilization of health-care facilities. Conversely, unreliable services, such as long waiting times or inconsistent treatment can lead to frustration and erode patient confidence. The significant association found in this study underscores the importance of maintaining and improving reliability to support patient satisfaction and strengthen the national health-insurance system [2,22-25].

### Responsiveness

Responsiveness also demonstrated a strong relationship with patient satisfaction, with 65.8% of patients satisfied and 34.2% dissatisfied. This dimension reflects the willingness of health-care staff to assist patients promptly, provide clear information, and respond effectively to patient needs. In primary-care settings, responsiveness is particularly important because many patients require repeated visits, ongoing medication guidance, and clear instructions regarding follow-up care.

The majority satisfaction indicates that patients generally felt attended to and informed. Quick responses, polite interactions, and clear explanations likely contributed to positive experiences. However, more than one-third of patients perceived shortcomings in responsiveness, suggesting that delays, unclear communication, or insufficient attention may still occur during peak service hours or in complex cases.

Responsiveness is widely recognized as a critical determinant of patient satisfaction. Prior study have demonstrated strong associations between responsiveness and satisfaction, emphasizing that prompt and effective communication enhances patient trust and comfort. The findings of this study support this perspective, showing that responsiveness significantly influences patient perceptions of care quality [26-29].

### Assurance

The assurance dimension presented the most challenging results, with 47.1% of patients satisfied and 52.9% dissatisfied. Assurance relates to the ability of health-care providers to instill confidence through professional competence, communication clarity, and trustworthy behavior. It encompasses staff knowledge, ethical conduct, and the capacity to provide patients with a sense of certainty regarding their care.

The relatively low satisfaction level indicates that many patients may have concerns about staff expertise, communication style, or the perceived professionalism of the health-care team. Patients may feel uncertain when explanations are unclear, when staff appear rushed, or when interactions do not convey confidence. This aligns with the argument by prior researcher, who emphasize that assurance is built through consistent professional behavior, strong work ethics, and visible commitment to patient welfare [30].

The findings suggest that enhancing assurance may require targeted interventions, such as communication training, professional development, and stronger emphasis on patient-centered care [31-34]. Because assurance is closely tied to trust, improvements in this dimension may significantly elevate overall patient satisfaction and strengthen the credibility of the primary-care center [35-37].

### Overall Interpretation

Taken together, the results indicate that the Bane Primary Health-Care Center performs well in reliability and responsiveness, moderately well in tangibles, and requires improvement in assurance. These patterns highlight the multifaceted nature of patient satisfaction and underscore the importance of addressing both physical and interpersonal aspects of care. Strengthening facility infrastructure, enhancing staff competence, and improving communication practices may collectively contribute to higher satisfaction and better health-care experiences for national health-insurance users.

## CONCLUSION

The study demonstrates that patient satisfaction among national health-insurance users at the Bane Primary Health-Care Center varies across the four dimensions of service quality. Reliability and responsiveness show the highest levels of satisfaction, indicating that patients generally perceive the services as consistent, accurate, and delivered with adequate promptness. Tangible aspects also contribute positively, although a notable proportion of patients still experience limitations in facility readiness and physical resources. Assurance emerges as the

weakest dimension, reflecting concerns about staff competence, communication clarity, and the ability to instill confidence. Overall, the findings highlight the need for strengthening physical infrastructure, enhancing professional assurance, and maintaining reliable and responsive service delivery to improve patient satisfaction and support the effectiveness of the national health-insurance program.

## Ethical consideration, competing interest and source of funding

-Ethical considerations were observed throughout the research process. Participants were informed about the purpose of the study, the voluntary nature of their involvement, and their right to withdraw at any time without consequences. Confidentiality was strictly maintained, and no personal identifiers were recorded. The study adhered to ethical principles of respect for persons, beneficence, and justice, ensuring that respondents were treated with dignity and that the research posed no harm. Approval from the appropriate institutional authority was obtained prior to data collection, ensuring that all procedures complied with established ethical standards for health-care research.
-There is no conflict of interest related to this research.
-Source of funding is authors.

## REFERENCES

1. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, Adeyi O, Barker P, Daelmans B, Doubova SV, English M. High-quality health systems in the Sustainable Development Goals era: time for a revolution. The Lancet Global Health. 2018 Nov 1;6(11):e1196-252.
2. Nugroho HSW, Suparji, Sunarto. Perceived Expected Quality-Spider Web Diagram (PEQ-SWEDIA) untuk penilaian kualitas pelayanan kesehatan. Bangli: Aliansi Aktivis Kesehatan / Alliance of Health Activists (AloHA): 2018.
3. Ali J, Jusoh A, Idris N, Nor KM. Healthcare service quality and patient satisfaction: a conceptual framework. International Journal of Quality & Reliability Management. 2024 Jan 22;41(2):608-27.
4. Nugroho HSW, Suparji, Sunarto. Indeks kepuasan masyarakat berbasis unit dan elemen (IKMaBUDE) dalam penilaian kualitas pelayanan kesehatan. Bangli: Aliansi Aktivis Kesehatan / Alliance of Health Activists (AloHA): 2018.
5. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. Perspectives in Public Health. 2017 Mar;137(2):89-101.
6. Nugroho HSW. Kualitas layanan kesehatan menurut persepsi konsumen. Ponorogo: Forum Ilmiah Kesehatan (FORIKES); 2011.
7. Tumirah. Nugroho HSW. Analisis kualitas internet kampus Prodi Kebidanan Magetan menurut persepsi pengguna. Jurnal Penelitian Kesehatan SUARA FORIKES. 2010;1(Edisi Khusus HKI):11-17.
8. Nugroho HSW. Tingkat kepuasan masyarakat terhadap desa siaga. Jurnal Penelitian Politeknik Kesehatan. 2008;6(3):62-8.
9. Baroroh MA, Nugroho HSW, Ngestiningrum AH. Survey kualitas pelayanan posyandu balita di Desa Majasem, Kecamatan Kendal, Kabupaten Ngawi. Gema Bidan Indonesia. 2023;10(1):82-8.
10. Nugroho HSW, Rumpiati. Deskripsi kualitas internet kampus secara multi dimensi di Kampus Kebidanan Magetan Poltekkes Kemenkes Surabaya. Jurnal Penelitian Kesehatan SUARA FORIKES. 2011;2(2):135-138.
11. Agustina N, Hidayat R, Dermawan A, Hadi A. Universal Health Coverage and hospital service satisfaction in socio-economically vulnerable tourism areas. Journal of Contemporary Governance and Public Policy. 2025 Oct 9;6(2):117-34.
12. Ekawati FM, Claramita M, Hort K, Furler J, Licqurish S, Gunn J. Patients' experience of using primary care services in the context of Indonesian universal health coverage reforms. Asia Pacific Family Medicine. 2017 Mar 21;16(1):4-8.
13. Kemenkes RI. Profil kesehatan Indonesia tahun 2022. Jakarta: Kemnterian Kesehatan Republik Indonesia; 2023.
14. Okonofua F, Ogu R, Agholor K, Okike O, Abdus-Salam R, Gana M, Randawa A, Abe E, Durodola A, Galadanci H. Qualitative assessment of women's satisfaction with maternal health care in referral hospitals in Nigeria. Reproductive Health. 2017 Mar 16;14(1):44-52.
15. Nugroho HSW, Wahyuningsih D, Widajati S. Pengaruh kualitas dimensi tangibles, reliability, responsiveness, assurance, dan empathy terhadap kualitas PAUD secara keseluruhan. Jurnal Penelitian Kesehatan Suara Forikes. 2010;Edisi Khusus Hari Kesehatan Nasional:10-21.
16. Sunarto S, Nugroho HSW, Suparji S. Indeks Kepuasan Masyarakat Berbasis Unit dan Elemen (IKMa-BUDE) dalam pelayanan Puskesmas Ngariboyo, Magetan. 2-TRIK: Tunas-Tunas Riset Kesehatan. 2020 Nov 30;10(4):265-72.
17. Herlina T, Nugroho HSW, Suparji S. Community satisfaction survey in "Widodaren" Community Health Center. Journal of Global Pharma Technology. 2020 Sep 30;12(09):40-4.
18. Nugroho HSW. Methodological rigor in health research: Ensuring the best approach to address clinical and public health objectives. Health Notions. 2026 Jan 31;10(1):1-3.
19. Nugroho HSW, Santosa BJ. Misleading use of the terms of univariate and bivariate analysis in health research. Health Notions. 2019 Aug 31;3(8):352-6.
20. Suparji, Nugroho HSW, Martiningsih W. Tips for distinguishing nominal and ordinal scale data. Aloha International Journal of Multidisciplinary Advancement (AIJMU). 2019;1(6):133-5.
21. Nugroho HSW. Biostatistik untuk mahasiswa D3 kebidanan. Ponorogo: FORIKES; 2013.
22. Mzee AW, Mzomwe M, Liana Y. The role of service quality in automated health systems on customer satisfaction: Evidence from National Social Security Fund (NSSF) Ilala, Dar es Salaam, Tanzania. African Journal of Empirical Research. 2025 Nov 20;6(4):884-97.
23. Wulandari RY, Rachmawan A, Hartono B, Daud AG. Patient satisfication as consumers: A literature review on the determinants of health service quality in the JKN era. Hearty. 2026 Feb 3;14(1):49-56.
24. Cynthia AN, Kılıç B, Komuhangi A, Laure NN. Determinants of patient satisfaction with healthcare services among insured and uninsured patients at a public hospital in Cameroon: A comparative cross-sectional study using the modified PSQ-18 questionnaire. Journal of Public Health Research. 2025 Jun;14(2):22799036251345936.
25. Karmacharya BM, Marasini S, Sharma S, Adhikari M, Pandey S, Shrestha RM, Jnawali SP, Baral U, Koju P, Xu DR. Patient satisfaction with the components of the National Health Insurance Program of Nepal: A cross-sectional study. BMC Health Services Research. 2025 May 31;25(1):779.
26. Yusefi AR, Davarani ER, Daneshi S, Bastani M, Mehralian G, Bastani P. Responsiveness level and its effect on services quality from the viewpoints of the older adults hospitalized during COVID-19 pandemic. BMC Geriatrics. 2022 Aug 9;22(1):653.
27. Achstetter K, Köppen J, Hengel P, Blümel M, Busse R. Drivers of patient perceptions of health system responsiveness in Germany. The

International Journal of Health Planning and Management. 2022 Dec;37:166-86.
28. Berinyuy B, Forje LC, Dzekashu LG. Service quality, a correlation of customer expectation and customer perception of services received responsiveness and empathy in Shisong hospital. Int. J. Soc. Sci. Hum. Res. 2021;4:3495-505.
29. Abidova A, da Silva PA, Moreira S. Predictors of patient satisfaction and the perceived quality of healthcare in an emergency department in Portugal. Western Journal of Emergency Medicine. 2020 Jan 27;21(2):391.
30. Sijabat HH, Widjaja G. Hospital service ethics and culture: patient and employee safety protection based on the code of ethics, cultural values, and health laws–literature review. INJOSEDU: International Journal of Social and Education. 2025 Oct 6;2(8):2486-96.
31. Santana MJ, Manalili K, Jolley RJ, Zelinsky S, Quan H, Lu M. How to practice person-centred care: A conceptual framework. Health Expectations. 2018 Apr;21(2):429-40.
32. Olowomeye E. Exploring interdisciplinary family medicine approaches to improve chronic disease management and patient-centered outcomes. Int J Res Publ Rev. 2025 May;6(5):12378-95.
33. Bombard Y, Baker GR, Orlando E, Fancott C, Bhatia P, Casalino S, Onate K, Denis JL, Pomey MP. Engaging patients to improve quality of care: A systematic review. Implementation Science. 2018 Jul 26;13(1):98.
34. Karera A, Uugwanga M, Kalondo L, Amkongo M. Patient-centred care and technical challenges during polytrauma imaging–Experiences from radiography students. Radiography. 2025 Mar 1;31(2):102872.
35. Ampaw EM, Chai J, Liang B, Tsai SB, Frempong J. Assessment on health care service quality and patients' satisfaction in Ghana. Kybernetes. 2020 Nov 13;49(12):3047-68.
36. Manzoor F, Wei L, Hussain A, Asif M, Shah SI. Patient satisfaction with health care services; an application of physician's behavior as a moderator. International Journal of Environmental Research and Public Health. 2019 Sep;16(18):3318.