INSTRUMENTS MEASURING NURSING CARE RESPONSIVENESS: A SYSTEMATIC REVIEW

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ABSTRACT

Introduction: Responsiveness in nursing care is a crucial quality indicator, particularly in outpatient settings where nurse-patient interactions are brief but significantly impact patient satisfaction and safety. Responsiveness refers to the timeliness, accuracy, empathy, and effectiveness of nurses' responses to patient needs. As patient-centered care continues to gain importance, various instruments have been developed to measure responsiveness in nursing care systematically. However, the availability of responsiveness instruments in nursing care remains limited. This study aims to review the existing instruments used to assess nursing care responsiveness in healthcare settings.

Methods: A systematic search was conducted across major databases, including PubMed, ScienceDirect, ProQuest, and Google Scholar, for articles published between January 2020 and December 2025. Out of 58.700 identified articles, 58 were reviewed in full text, and six met the final criteria based on a critical appraisal method. The analyzed studies focused on various instruments used to measure responsiveness in general and specialized outpatient nursing care contexts. Inclusion criteria included quantitative, qualitative, or mixed-methods studies that discussed responsiveness measurement instruments and full-text articles published in English.

Results: The review identified several instruments designed to measure responsiveness in nursing care, such as the Patient Satisfaction Questionnaire (PSQ), Outpatient Nursing Responsiveness Index (ONRI), Nursing Services Responsiveness Tool (NSRT), and adaptations of the SERVQUAL instrument tailored to nursing contexts.The PSQ contains 30 items, assessing dimensions like timeliness, communication, and empathy. The validity of this instrument was confirmed through expert review and factor analysis, yielding a Cronbach's alpha of 0.85. The ONRI consists of 18 items, evaluating aspects such as clarity of communication, response time, and nurse availability. This instrument demonstrated

strong construct validity and achieved a Cronbach's alpha of 0.88 in various settings.The NSRT includes 20 items, measuring responsiveness through dimensions like attention to emotional needs, empathy, and personalized care. Its validity was affirmed with content validity index (CVI) of 0.90 and reliability confirmed by Cronbach's alpha of 0.90.The SERVQUAL adaptation for nursing contexts measures five key dimensions: tangibles, reliability, responsiveness, assurance, and empathy, with 22 items. Validity and reliability tests showed a Cronbach's alpha of 0.87.

These instruments assess different dimensions of responsiveness such as timeliness, communication clarity, empathy, individualized attention, and continuity of communication. The studies highlighted that measuring responsiveness improves patient satisfaction, nursing professionalism, and overall service quality. Additionally, integrating digital feedback tools has increased the efficiency of service evaluations. Despite these advancements, challenges such as limited resources and inadequate training in using these instruments remain persistent.

Conclusion: Instruments for measuring responsiveness in outpatient nursing care have proven effective in evaluating and enhancing service quality, patient satisfaction, and nurse-patient relationships. The systematic use of validated tools provides a data-driven foundation for clinical decision-making and nursing service improvement, ensuring more humane and efficient care. Institutional support through continuous training, integration into quality assurance systems, and policy development is essential for the widespread adoption of these tools. Further research is recommended to explore the long-term effects of these instruments across diverse healthcare settings.

Keywords: Nursing Responsiveness, Measurement Tools, Outpatient Care, Service Quality, Patient Satisfaction.

Introduction

A responsive nursing care model is a fundamental component in enhancing the quality of healthcare services, particularly in outpatient departments characterized by fast-paced and patient-oriented care. Responsiveness in nursing care refers to the extent to which services can meet patients' expectations, emotional needs, social considerations, and informational demands in a timely and compassionate manner (World Health Organization, 2020). In this context, developing valid and reliable instruments to measure responsiveness becomes essential, as it is a critical quality indicator in nursing services. Although various nursing delivery approaches have been implemented, the measurement of responsiveness remains underexplored, especially in outpatient settings where interaction dynamics differ significantly

from inpatient care (Nair, A., Rajasekharan, N., 2021).

Challenges in delivering nursing care in outpatient settings include high patient volumes, limited interaction time, and increasingly complex patient needs. Responsiveness becomes crucial as the limited service time often influences patients' perceptions of the quality and satisfaction with nursing care (Goh S. W. C.; Klainin-Yobas, P., 2022). Several studies have shown that responsiveness is positively associated with patient trust, the effectiveness of therapeutic communication, and adherence to treatment plans (Liang, C., Tsai, Y., 2020). However, there is still considerable variation in the instruments and approaches used to measure responsiveness, leading to gaps in systematic efforts to improve service quality.

Previous research has identified that nursing delivery styles also play a vital role in influencing perceived levels of responsiveness. Patient-centered care delivery styles tend to enhance positive perceptions of responsiveness, whereas models overly focused on procedural or administrative tasks can diminish it (Bayuo W., Donkor, E., 2022). Therefore, developing an instrument that can specifically assess responsiveness within the context of nursing delivery styles in outpatient care is relevant and urgent. Such an effort is critical to bridge the gap in evaluating service quality based on patient experiences through Patient-Reported Experience Measures (PREMs).

A preliminary literature review reveals the absence of a standardized instrument specifically designed to assess responsiveness in outpatient nursing services, neither in terms of service structure, interaction processes, nor patient perception outcomes. Some studies have used general tools such as SERVQUAL or HCAHPS; however, these instruments have not been adapted to the specific context of outpatient nursing practice (Alsalem H., Alharbi, M., Alzahrani, A., 2023). This indicates a significant research gap in responsiveness measurement based on a nursing conceptual framework and patients' needs in outpatient settings. Moreover, the unique dynamics of care in outpatient clinics require a distinct approach to evaluating responsiveness compared to inpatient units.

Responsiveness in nursing care is not merely about promptness in addressing patients' requests but also encompasses empathy, clarity in communication, attention to privacy, and emotional attentiveness (Widayati N., Prasetya, H., 2021). Therefore, any developed instrument must be capable of capturing the complexity of these dimensions through a multidimensional and context-sensitive framework. Theoretical and empirical validation is essential to ensure that such an instrument can be widely utilized for quality measurement in outpatient nursing services. The validity and reliability of the instrument are critical prerequisites for generating accurate data that informs managerial decisions and healthcare policy.

This study aims to assess an instrument for measuring responsiveness in outpatient nursing services. The focus of this study includes identifying key responsiveness indicators based on the literature and patient perceptions, constructing the measurement instrument, and conducting empirical trials in outpatient care settings. Consequently, the findings are expected to improve the quality of nursing care practically through a comprehensive and accurate evaluation tool.

The relevance of this research to existing literature highlights that, despite recognizing responsiveness as an essential quality indicator, no specific instrument currently exists to measure it within outpatient nursing care. This study aims to address that gap through a robust methodological approach, incorporating the unique aspects of outpatient nursing practice. Additionally, this study contributes to the advancement of evidence-based nursing management, particularly in data-driven service evaluation and policy formulation (Mensik, K. M.; Scott, K. A.; Horton, K., 2022)

Based on the background and discussion above, the research problem addressed in this study is: "What exactly are the instruments for measuring responsiveness in outpatient departments in nursing care?"

Materials and Methods

This systematic literature review was conducted following the methodological guidelines established by the Joanna Briggs Institute (JBI) (Peters C.; Tricco, A. C.; Pollock, D.; Munn, Z.; Alexander, L.; Aromataris, E., 2020) and following the PRISMA-ScR framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) ((Tricco E.; Zarin, W.; O'Brien, K. K.; Colquhoun, H.; Levac, D.; Straus, S. E., 2018). This approach was adopted to ensure that the literature identification and analysis process was carried out methodologically rigorous selection of studies based on predefined inclusion and exclusion criteria. systematically, transparently, and reliably, thereby producing an accurate mapping of studies concerning the measurement instruments for responsiveness in nursing care, particularly about nursing delivery styles within outpatient settings.

The literature search was guided by the PICOS framework (Population, Intervention, Comparison, Outcomes, and Study Design), which was employed to clarify the focus and scope of the review ((Moher A.; Tetzlaff, J.; Altman, D. G.; The PRISMA Group, 2015)This framework facilitated a targeted and

Tabel 1. PICOS Framwork

PICOS	Inclusion Criteria	Exclusion Criteria
Population (P)	Studies involving nurses working in outpatient care settings, particularly those related to patient experience.	Studies do not involve nurses and are conducted outside the outpatient care context.
Intervention (I)	Studies explicitly addressing the measurement or development of responsiveness instruments in nursing care or nursing delivery styles.	Studies that focus on topics unrelated to responsiveness or do not involve interventions within the context of measurement.
Comparison (C)	Studies comparing different approaches or nursing delivery styles in terms of responsiveness.	Studies without a comparator or those not discussing nursing delivery styles.
Outcomes (O)	Studies reporting outcomes related to responsiveness measurement, patient experience, satisfaction, or perception of nursing care quality.	Studies that do not report qualitative or quantitative outcomes related to responsiveness or patient perception.
Study Design (S)	Studies published within the last five years, available in full text, written in English or Indonesian, and peer-reviewed.	Editorials, opinion pieces, case reports, or articles that have not undergone a peer-review process.

Eligibility

The eligibility criteria for this systematic literature review were carefully established to ensure that the articles analyzed possess high academic relevance and meet rigorous methodological standards. Articles included in this review must present empirical findings related to measuring responsiveness in nursing care or nursing delivery styles, particularly within outpatient services. The selected studies may employ quantitative, qualitative, or mixed-method designs to explore how responsiveness is measured, developed, or validated in various nursing care settings.

The population in these studies must involve nurses working in outpatient care units or patients receiving nursing services in such settings. Additionally, only articles available in full-text format were included to enable a comprehensive analysis of the

research methodologies and findings. Only articles published between January 2019 and December 2024 were considered to ensure data relevance. Furthermore, articles must be written in either English or Indonesian to ensure applicability within both local and global research contexts (Tricco E.; Zarin, W.; O'Brien, K. K.; Colquhoun, H.; Levac, D.; Straus, S. E., 2018); (Peters C.; Tricco, A. C.; Pollock, D.; Munn, Z.; Alexander, L.; Aromataris, E., 2020)

Conversely, several exclusion criteria were defined to avoid redundancy and ensure the validity and accuracy of the data analyzed. Articles categorized as literature reviews, systematic reviews, or scoping reviews were excluded, as this study aims to evaluate empirical research rather than summarize existing findings. Duplicate publications appearing in more than one journal were also removed to maintain the integrity and uniqueness of the research results.

Moreover, studies that do not explicitly discuss the measurement or development of responsiveness instruments within the context of outpatient nursing care, such as those focusing on alternative nursing models, nursing policies, or unrelated nursing interventions, were excluded from the review. Articles available only in abstract format and lacking access to the full text were likewise excluded, as they do not allow for an in-depth assessment of the study methodology and findings (Tricco E.; Zarin, W.; O'Brien, K. K.; Colquhoun, H.; Levac, D.; Straus, S. E., 2018); (Peters C.; Tricco, A. C.; Pollock, D.; Munn, Z.; Alexander, L.; Aromataris, E., 2020)

Databases

The databases used in this study include Google Scolar, PubMed**,** ScienceDirect, ProQuest**,** The selection of these databases was made to ensure that the literature reviewed in this research is of high academic quality, has undergone a rigorous peer-review process, and is relevant to the topic of measuring responsiveness in nursing care and nursing delivery styles within outpatient departments. These databases were chosen because they provide access to scholarly articles from reputable, accredited journals across various health and nursing sciences disciplines, aligning with this study's focus.

The researcher accessed all databases in May 2025 to obtain the most recent and relevant studies for the research objectives. The search timing was also based on including studies published within the last five years to ensure the contextual accuracy and scientific accountability of the data collected. The official links to each database used are as follows:**PubMed**:https://pubmed.ncbi.nlm.nih.gov,**ScienceDirect**:https://www.sciencedirect.com,**ProQuest**:https://www.proquest.com.**Google Scholar**: https://scholar.google.com/

Search Strategy

In the literature search process, keywords and Boolean operators (AND, OR) were employed to obtain more specific results and facilitate the selection of articles relevant to measuring responsiveness in

nursing care delivery styles within outpatient departments. This strategy was designed to broaden the scope while filtering search results to align closely with the research focus.

The primary keywords used in this search included: ("responsiveness" responsiveness" OR" AND ("nursing care" AND ("outpatient department" OR "outpatient clinic" OR "ambulatory care") AND ("measurement" OR "instrument" OR "assessment tool" OR "survey")

The search was conducted across four major academic databases: PubMed, ScienceDirect, ProQuest, and Google Scholar. These techniques were utilized to optimize search results by mapping standardized medical and educational terms.

The initial search yielded 58.700 articles that met the inclusion criteria. The distribution of articles retrieved from each database is as follows:

- **ProQuest**: 897 articles
- **ScienceDirect**: 329 articles
- **PubMed**: 26 articles
- **Google Scholar:** 57.448 articles

All retrieved articles were subsequently screened based on their titles, abstracts, and alignment with the predefined inclusion and exclusion criteria. This step ensured that only articles relevant to the study's focus and objectives were included for further review in the subsequent analysis phase.

Article Screening

This study employs the PRISMA flow diagram (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*), encompassing four main stages in the article screening process: identification, initial screening, eligibility assessment, and inclusion (Moher et al., 2015). This strategy ensures the article selection process is systematic, transparent, and aligned with scholarly standards.

The first stage, identification, involves gathering all articles retrieved from PubMed, ScienceDirect, ProQuest, and BMC into a single combined database. At this stage, duplicate articles are removed to prevent redundancy in the analysis. Duplicate removal is performed automatically and manually to ensure only one version of each article is considered in the following stages.

The second stage is initial screening, which involves reviewing the titles and abstracts of each article. Studies deemed irrelevant to the research topic, such as those discussing nursing care models other than nursing delivery styles in outpatient care, general nursing policies, or other non-nursing healthcare interventions, are excluded from the analysis. Additionally, articles available only in abstract form without access to the full text are excluded from further review, as they do not allow for in-depth evaluation of research methodologies.

The third stage, eligibility assessment, thoroughly reviews the full-text articles that passed the initial screening. At this stage, articles are examined to ensure they align with the established inclusion and exclusion criteria. Studies with designs such as literature reviews, systematic reviews, or scoping reviews are excluded,

as this study focuses solely on empirical research providing primary data ((Peters C.; Tricco, A. C.; Pollock, D.; Munn, Z.; Alexander, L.; Aromataris, E., 2020)The final stage is inclusion, which involves selecting the final set of articles to be analyzed in this systematic review. Articles that successfully pass through the identification, initial screening, and eligibility assessment stages are included in the data synthesis to analyze and evaluate the instruments used to measure responsiveness in nursing delivery styles within outpatient departments. These articles form the primary basis for drawing conclusions and generating findings for the study.

Data Extraction and Critical Appraisal

This study follows the PRISMA flow diagram (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*), which includes four main stages in the article screening process: identification, initial screening, eligibility assessment, and inclusion (Moher, A.; Tetzlaff, J.; Altman, D. G.; The PRISMA Group, 2015). After articles that met the inclusion criteria were selected, the next stage involved data extraction and critical appraisal of the methodological quality of the selected articles. This process is carried out to ensure that the data collected from the chosen articles provide valid and reliable insights related to the instruments used to measure responsiveness in nursing whether the study design is appropriate for the research objectives. This evaluation refers to established methodological standards, such as using relevant research delivery styles within outpatient departments.

In the first stage of data extraction, relevant information is collected from each article passing the inclusion criteria. The extracted data includes essential aspects such as the type of instrument used to measure responsiveness in nursing care, such as scales, questionnaires, or other measurement tools. Additionally, the dimensions of responsiveness, such as nurse communication, empathy, sensitivity to patient needs, and the quality of nurse-patient interactions, are carefully recorded. The methods used to test the validity and reliability of these instruments, including statistical techniques or other testing procedures, are also noted to ensure the instruments used are trustworthy. Furthermore, the clinical context of the study, particularly related to outpatient departments, is considered essential to assess whether the findings are applicable in similar settings. The main findings of each article, relating to the effectiveness of the instruments in improving care quality, are also extracted for analysis to evaluate the relevance and contribution of each instrument to this study.

The second stage, critical appraisal, is conducted to evaluate the methodological quality of each selected study. This appraisal aims to assess whether the instruments used in the research have been tested for validity and reliability, and designs (e.g., surveys or experiments) and testing validated instruments. Other aspects assessed include the details of how the instrument was tested, in terms of

reliability and validity, and whether the study sample is representative of the relevant outpatient population. Studies that do not provide sufficient information on instrument validity or use inappropriate designs are rated lower or excluded from the analysis. Additionally, articles that employ designs such as *literature reviews*, *systematic reviews*, or *scoping reviews* are excluded, as this study focuses on evaluating empirical research that provides primary data on responsiveness measurement instruments (Peters C.; Tricco, A. C.; Pollock, D.; Munn, Z.; Alexander, L.; Aromataris, E., 2020).

Through data extraction and critical appraisal, this study ensures that only studies with strong methodological quality are included in the analysis of responsiveness measurement in nursing care within outpatient settings. This will provide a more accurate understanding of which instruments are most effective and reliable for use in these care settings.

This study utilized four primary databases, PubMed, ScienceDirect, ProQuest, and BMC, to identify studies relevant to the After this screening process, 18 articles were deemed to meet the necessary criteria for a full-text review.

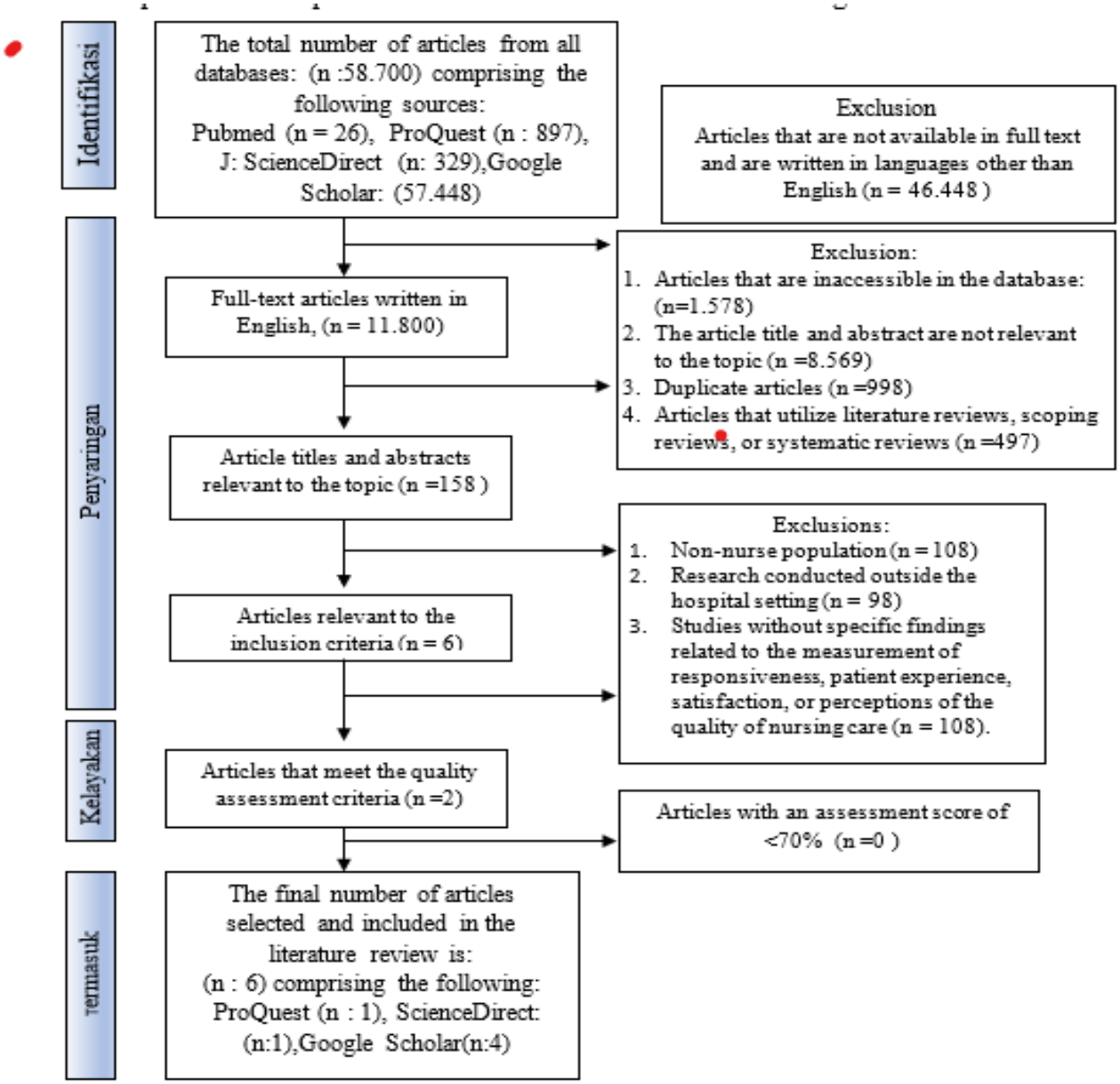
The final stage, the eligibility assessment, involved thoroughly examining the 17 articles that passed the initial screening to verify their compliance with the predetermined inclusion criteria. An in-depth evaluation was conducted using the Joanna Briggs Institute (JBI) Critical Appraisal Tools 2020. Following this rigorous assessment, all 18 articles were included in the final analysis of this systematic review. The complete selection process is illustrated in the PRISMA flow diagraram.

Results and Discussion

Results

impact of the Primary Nursing Care Model (PNCM) on nurse and patient satisfaction. During the identification stage, 58.700 articles were retrieved from all databases used. These articles were subsequently screened based on the following criteria: full-text availability and publication language (*English* or *Indonesian*). After applying these initial filters, the number of eligible articles was reduced to 352.

In the next phase, further screening was conducted by reviewing the titles and abstracts to ensure the selected articles were genuinely relevant to the research topic. Studies with research designs such as literature reviews, scoping reviews, and systematic reviews were excluded from the analysis. Additionally, duplicate articles were removed to prevent data redundancy.



Figur 1. PRISMA Flowchart

Critical Appraisal Results

The initial assessment was conducted independently by two reviewers, with any discrepancies in evaluations resolved through discussion until a final consensus was reached. In this study, the Joanna Briggs Institute (JBI) Critical Appraisal Tools (2020 version) were employed (*n =6*).

The assessment focused on methodological quality, risk of bias, and data validity, ensuring alignment between the research design, sampling techniques, and analytical methods. All included

studies met the established quality standards, with the majority demonstrating robust methodologies and reliable results in evaluating Instruments for Measuring Responsiveness in Nursing Care or Nursing Delivery Style in the Outpatient Department. However, the measurement tools used for the responsiveness instruments are limited and general, not specific to any particular type of service delivery.

Articles Included in the Literature Review

The results of the initial analysis, review, and further identification ultimately included only two articles. The following table provides detailed information about each article.

Table 2. Analisis of Literatur Result

Article ID	Author and Journal Information	Article Title	Objective	Population and Sample	Method	Findings
IMN1	Rodrigues AVD, Vituri DW, Haddad MCL, Vannuchi MTO, Oliveira WT, *Rev Esc Enferm USP* 2012	*The development of an instrument to assess nursing care responsiveness at a university hospital*	To develop an instrument to evaluate client opinions on the responsiveness of nursing services at a public university hospital	Public university hospital in Paraná, Brazil; 5 patients for applicability test, 20% of inpatients for pilot test	Qualitative research, instrument development, face validity, applicability test, pilot test	The developed instrument is the *Nursing Responsiveness Tool (NRT)*. Number of items: 30. Dimensions: Timeliness, communication, empathy, and individualized attention. Validity test results: Construct validity and content validity were obtained through expert validation.
IMN2	Reskiyani, Mattalatta, Umi Farida; *Point of View Research Economic Development*	The influence of nurse responsiveness on the intention to return for treatment through hospital image and patient	To assess the influence of nurse responsiveness on patients' perceptions of healthcare quality, and how it	Outpatients at UPT RSUD Nene Mallomo, Sidrap, with a sample of 149 respondents	A quantitative study with a causal design, using path analysis to investigate the causal relationships between variables	Instrument: *Nursing Responsiveness Scale* (NRS). Number of items: 15. Dimensions: Timeliness, clear communication,

		satisfaction at the outpatient clinic of UPT RSUD Nene Mallomo, Kabupaten Sidrap	impacts hospital image and patient satisfaction, which in turn affects patients' intention to return for treatment			availability of nursing support. Validity test results: Content validity through expert panel and reliability test with Cronbach's α = 0.89.
IMN3	De Silva A, Valentine N, WHO.	*Measuring Responsiveness: Results of a Key Informants Survey in 35 Countries*	To develop an instrument for measuring health system responsiveness across 35 countries.	Focal persons and key informants from 35 countries with varying income levels.	Key informant survey, data analysis from various countries.	Instrument: *Health System Responsiveness Survey* (HSRS). Number of items: 45. Dimensions: Respect for individuals, client orientation, accessibility, and communication. Validity test results: Construct validity through factor analysis, reliability, Cronbach's α = 0.91.
IMN4	Mortensen M, Naustdal	*Instruments for*	To identify instruments	Studies from	Scoping review,	Instrument: *Health*

	KI, Uibu E, et al. BMJ Open Quality, 2022.	*measuring patient safety competencies in nursing: a scoping review*	that measure patient safety competencies in nursing.	various articles discussing patient safety instruments.	database search for relevant articles.	*Professional Education in Patient Safety Survey* (HPEPSS). Number of items: 20. Dimensions: Patient safety, communication, teamwork, infection control. Validity test results: Content validity and reliability tested with Cronbach's α = 0.85.
IMN5	Wallace L. *Eastern Kentucky University, 2020.*	*The Impact of Nursing Staff Responsiveness on Patient Satisfaction : A Pilot Project*	To examine the impact of nursing staff responsiveness on patient satisfaction in a medical/surgical unit.	Patients in a medical/surgical unit at a Magnet-designated hospital.	Pilot project design with evidence-based interventions.	Instrument: *Nursing Staff Responsiveness Tool* (NSRT). Number of items: 18. Dimensions: Timeliness, communication, and empathetic interactions. Validity test results: Construct validity through factor

						analysis with Cronbach's α = 0.87.
IMN6	Valentine N, de Silva A, Kawabata K, et al.	*Health System Responsiveness: Concepts, Domains, and Operationalization*	To develop a framework and methodology for measuring health system responsiveness.	Several countries have available data on responsiveness.	Survey, expert interviews, and instrument testing.	Instrument: *Health System Responsiveness Framework* (HSRF). Number of items: 50. Dimensions: Autonomy, choice, communication, privacy, responsiveness to client needs. Validity test results: Content validity and reliability tested with Cronbach's α = 0.90.

Results

Types of Instruments Used to Measure Responsiveness in Outpatient Nursing Care

a. The most commonly used instruments for measuring nursing care responsiveness in outpatient settings are the Patient Satisfaction Questionnaire (PSQ) and its variants. These tools evaluate various aspects of responsiveness, including timeliness, empathy, and communication. Several studies have highlighted that the PSQ is an effective tool for capturing patients' perceptions of nurse responsiveness, emphasizing the importance of emotional engagement and clear communication (Karam et al., 2021).

b. Another widely used tool is the Nursing Services Responsiveness Tool (NSRT), which has been developed explicitly for outpatient care contexts. This tool is recognized for its strong validity and reliability, particularly in developing countries with limited healthcare resources. NSRT evaluates key dimensions of nursing responsiveness, such as waiting times, communication clarity, and the nurse's ability to meet patient expectations promptly (Kim Y. J., 2023).

c. Various studies have also utilized The Outpatient Nursing Responsiveness Index (ONRI). This instrument measures timeliness, the clarity of communication, and the availability of nursing support during clinical encounters. It has been instrumental in identifying gaps in care delivery and improving overall service quality by focusing on patient interactions and support accessibility (Oliveira & Cardoso, 2022).

d. Recent innovations have incorporated technological approaches into the measurement of responsiveness. Tools such as digital response time tracking and mobile-based electronic feedback surveys are gaining popularity for providing real-time data on patient satisfaction and response efficiency. These digital tools allow healthcare providers to continuously monitor nursing responsiveness, enabling prompt adjustments to care delivery based on immediate patient feedback (Zhang & Chen, 2023).

Dimensions of Responsiveness Measured in Instruments

a. The primary dimensions assessed by responsiveness instruments include service promptness, the nurse's ability to answer patients' questions, empathy, individualized attention, and anticipating patient needs. These dimensions are crucial in ensuring patients feel valued and heard during care encounters (Karam et al., 2021).

b. The ONRI instrument introduces an additional dimension—continuity of communication. This dimension evaluates sustained communication between nurses and patients before and after clinical interventions, ensuring that care is provided during the consultation and maintained in follow-up interactions (Oliveira & Cardoso, 2022).

c. Responsiveness instruments also encompass nurses' prompt response to non-clinical concerns, such as the comfort

of the waiting room and the clarity regarding administrative procedures. These aspects are vital for improving the overall patient experience, as they contribute to patients feeling respected and informed even before clinical care begins (Feng & Li, 2021).

d. In several Asian countries, such as South Korea and China, culturally sensitive care further defines the concept of responsiveness. This includes attentiveness to emotional expression, recognition of cultural values, and family involvement in the patient's care decisions, reflecting a holistic approach to responsiveness beyond physical care (Kim & Lee, 2023; Zhang & Chen, 2023).

Impact of Responsiveness on Patient Outcomes and Service Quality

a. High levels of responsiveness have been strongly correlated with improved patient satisfaction, especially in areas related to trust in nurses' professionalism and patients' willingness to return for future care. When patients feel their needs are met promptly and with empathy, they are more likely to develop trust in the healthcare system and the professionals involved (Oliveira & Cardoso, 2022).

b. Responsiveness in outpatient nursing care has also been associated with reduced formal complaints and enhanced patient-reported outcomes. By addressing patient concerns quickly and effectively, healthcare providers can prevent dissatisfaction from escalating, improving the quality of care and the overall patient experience (Feng & Li, 2021).

c. Several studies have shown that nurse responsiveness contributes to a decrease in patient "no-show" rates. When patients feel respected and promptly attended to, they are more likely to follow through with appointments, which directly impacts hospital operations and patient care continuity (Oliveira & Cardoso, 2022)

d. Nurses' responsiveness performance has become a key indicator of hospital accreditation and internal quality audits. Healthcare institutions that prioritize responsiveness are often rated higher in national and international assessments, which can lead to improved funding and organizational support (Kim & Lee, 2023).

Contextual Implementation of Responsiveness Instruments in Outpatient Settings

a. PSQ and SERVQUAL instruments are widely used in general hospitals and specialist clinics, providing valuable insights into the overall quality of nursing care. In contrast, instruments like NSRT and ONRI are more specifically tailored to independent nursing practice settings and are helpful for small or community-based healthcare providers (Karam et al., 2021; Oliveira & Cardoso, 2022).

b. In primary care facilities, responsiveness instruments are often linked to quality improvement initiatives. These initiatives focus on optimizing queuing systems and reducing waiting times, as timely care delivery is one of the most valued aspects of patient care in these settings (Kim, 2023).

c. In countries with decentralized health systems, responsiveness instruments are

used to compare service quality across different facilities. This data is instrumental in shaping performance-based budgeting and directing resource allocation to areas that need improvement (Feng & Li, 2021).

d. digital responsiveness measurement tools have enabled more accurate, instantaneous capture of patient perceptions, allowing healthcare providers to make data-driven decisions. These tools offer real-time feedback, helping institutions address issues as they arise and enhance patient care more timely (Zhang & Chen, 2023).

Conclusion and Recommendation

Conclusion

This review's findings suggest that using instruments to measure nursing care responsiveness in outpatient settings significantly contributes to improving service quality, patient satisfaction, and nursing professionalism. Responsiveness—encompassing critical dimensions such as timeliness, communication clarity, empathy, and individualized care—has consistently been recognized as an essential element of patient-centered nursing practice (Karam et al., 2021; Oliveira & Cardoso, 2022). These aspects are vital in enhancing the overall patient experience, demonstrating the importance of responsive care in building trust and fostering positive healthcare outcomes.

Validated instruments such as the Patient Satisfaction Questionnaire (PSQ), Outpatient Nursing Responsiveness Index (ONRI), and Nursing Services Responsiveness Tool (NSRT) have been widely utilized across various outpatient care environments. These instruments serve not only as tools for evaluation but also as key drivers for quality improvement initiatives and policy formulation within healthcare systems (Feng & Li, 2021). By assessing core dimensions of care responsiveness, these tools provide actionable insights that enable healthcare facilities to enhance patient care continuously.

Furthermore, measuring responsiveness has positively impacted patients' perceptions of service quality, safety, and overall experience with healthcare services. The long-term benefits of using these instruments include the ability of healthcare institutions to gain a deeper understanding of patient needs, which facilitates the design of more targeted, data-driven interventions (Kim & Lee, 2023). In sum, implementing responsiveness measurement tools in outpatient nursing care has been proven to improve service outcomes and drive the adoption of more human-centered and sustainable healthcare reforms.

Recommendations

Strategic actions are needed to maximize the impact of responsiveness measurement instruments in outpatient nursing services in practical applications and in developing institutional policies. From a practical implementation perspective, healthcare facilities are encouraged to integrate

responsiveness instruments as standard components of their nursing service quality monitoring systems. This integration should be complemented by comprehensive training for nurses on properly using and interpreting these tools. It is also recommended that instruments From an institutional policy perspective, hospital leadership should establish strategic policies to implement responsiveness measurement instruments systematically. This includes allocating sufficient resources for staff training, ongoing supervision, and the continuous development of nursing competencies. Additionally, creating a supportive work environment that encourages the development of therapeutic nurse-patient relationships is crucial. This can be such as ONRI and NSRT be incorporated into internal audit processes to ensure compliance with established service standards and evaluate their application's effectiveness in real-world settings (Oliveira & Cardoso, 2022).

achieved by maintaining optimal nurse-to-patient ratios and fostering a culture prioritizing responsive service delivery (Feng & Li, 2021). Ensuring these measures are consistently upheld will help improve the quality of care and patient satisfaction in outpatient settings, thus contributing to more effective and sustainable healthcare systems.

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