

Influence of Effective Nurse-Patient Interaction on Anxiety Levels Among Non-Urgent Triage Patients

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Abstract

Patients who present in a triage setting and fall into the yellow category typically exhibit anxiety as due to the nature of them falling in the yellow category, they are not sure of their condition and of their waiting time. The aim of the study is to determine how therapeutic communication becomes a significant indicator of the levels of anxiety among the yellow triage patients in the Ciremai Hospital. Empathy, active listening, and patient-focused interaction, which are the components of therapeutic communication, play an important role in minimizing stress and ensuring the psychological comfort of patients at the beginning of their hospital stay. The study used a cross-sectional design with a cross sectional observation and validated patient anxiety scales to determine association between communication strategies and patient anxiety. Findings show that there is a significant negative correlational relationship between the quality of therapeutic communication and the reported anxiety of the patients, which points out that patient-reported anxiety can be vastly decreased by practicing effective nurse-patient communication. Such data prove the value of including the training in therapeutic communication into the working process and triage procedures to enhance patient experience and raise the level of care delivery in general.

Keywords: *Integrated care, frailty, older adults, waiting lists, waiting times, coordinated services, rapid review, health systems, multidisciplinary care, patient-centred care.*

1.Introduction

EDs are the actual gateway to the health delivery system, because when a patient visits the emergency department they present with an acute condition of some sort, which may require emergent or urgent care. Such high-stakes medical systems are marked by the extremely quickened nature, complicated decision-making procedure, along with the continuous pressure to render life-saving actions on time. In such a challenging environment, the use of systematized triage processes has now become a necessity in terms of regulation of the flow of patients and prioritizing people with the most severe conditions. The triage system which first was developed in the military medical environment has become a complex classification tool where patients are prioritized by the priority of their medical needs and of possibly severe consequences of a delayed treatment.

The modern model of triage commonly adopts a four step-scheme in which P1 (red) denotes immediately life-threatening injuries requiring immediate attention, P2 (yellow) represents urgent cases that require prompt treatment but are not immediately life-threatening, P3 (green) is a non-urgent case that can be comfortably safely-waited, and P0 (black) is a deceased patient upon affiliation or death-compatible injury. Among such categories, there is a very weak location of P2 yellow patients within the emergency care chain. The patient groups bring with them conditions that are not necessarily life-threatening, but instead have high risks of worsening without timely nurse attention within a set window of time, 10 to 15 minutes once P1 cases are stabilized(1).

Psychological aspect of emergency care has become an important part of patient comprehensive care. Research studies in the field of healthcare psychology have unpackingly revealed that, the emergency department setting, with anxiety of whereabouts, noise, overcrowding and visible suffering, subjects patients, as well as, their accompanying family and relatives to severe psychological pressure. This aspect of stress reaction is especially present in P2 and its relatives since these people frequently exist in an emotionally tensed state owing to the uncertainty of their priority status. Whereas P1 patients are given the necessary attention, or P3 patients are in a clear knowledge of the possibility of long wait times, P2 individuals exist in the medical no-mans land, which may further add to psychological pain(2).

The issue of anxiety in emergency conditions can be viewed as a complex problem with its two aspects covering short-term anxiety reactions to actual medical issues and the more general psychological outcomes of anxiety related to uncertainty and perceived dangers that occur during emergency situations. Stress and coping studies

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have theoretical frameworks which can be used in ascertaining these coping and stress related psychological phenomena. The transactional model of stress and coping holds that personal assessment of possible stress situations is continuously undertaken in terms of primary and secondary appraisals. Primary appraisal is assessing whether a situation is a threat, challenge and disadvantage where secondary appraisal is concerned with access to available coping resources and ways to address the stressor. In emergency care, late treatment times, a lack of clear communication as to the wait times or procedures, and a lack of information regarding potential prognosis can all play a role in increasing threat appraisals.

There is no overstatement about the role of therapeutic communication in eliminating anxiety in emergency settings. Communication plays numerous constructive roles: it offers the necessary information that could make patients and caregivers understand their plight, alleviates doubts by outlining expectations and processes, indicates empathetic support and feelings and builds trust between the care member and the patient. On the contrary, the failure to communicate effectively during doctor/patient interactions through poor explanation, insufficient time, or medical jargon or even appearing dismissive may turn out to be a significant contributor to the heightened levels of anxiety. The complexity of the communication that must be provided to the patients with different levels of health literacy is enhanced by time pressures, volume of patients, and workload issues that staff members in emergency departments must attend to, as well as technical complexity of medical procedures and medical treatment(3).

Another important resource in psychological health of emergency clients is the family support. The benefit of family members may include emotional support, facilitating communications and decision-making, active help, and patient support advocate. Nonetheless, the traditional hospital setting has not always afforded sufficient family access especially at the emergency setting where workflow, infection prevention and space restrictions have not always provided ample access to families. The modern trends in healthcare consider the role of family-centered care patterns in terms of recognizing the family unit as the addressee of care and not individual patients.

The Indonesian healthcare case scenario raises distinctive concerns about the comprehension of anxiety in the emergency care. Cultural aspects of value to collective decision-making, the dignity of relationships, the need of family participation in health decisions and communication styles which prefer indirect over direct communication all play a role in contributors to patient/family anxiety in medical settings. Moreover, constraints in resource availability in most Indonesian hospitals, especially low resource facilities in the middle-level population serving hospitals, compound problems of delivering comprehensive psychosocial support interventions.

2.Methods

Study Design and Framework

This study will use a full-cycle theoretical study program in an observational study with cross-sectional design to assess the multifactorial causes of anxiety among patients of the emergency unit who have been categorized as the P2 yellow group. The cross-sectional study design has been specifically selected as it would allow to obtain concurrent relationships between more than two variables over what can be termed a time frame, allowing the researchers to gauge the complex interactions between demographic characteristics, healthcare delivery factors, and psychological outcomes at the same time(4). The research framework was based on the existing theoretical designs of stress and its coping reaction and the framework adopted the features of the transactional stress theory and social support concepts to ensure sound conceptual framework of selecting variables and methods of analysis. Quantitative measurement instruments and observational method of collecting data was included into the research design to provide the overall estimated picture of all the factors that can make the patient anxious in the emergency care environment as these two methods are complementary.

Study Setting and the Context of the Setting

The study was carried out in Emergency Department of RSUD Ciremai, a Type C referral hospital in Cirebon city in West Java province in Indonesia. The choice of this facility was strategic in the sense that it is a mid-level hospital with a vast population of diverse patients makes it a good facility to conduct the research, high number of emergency visits makes it possible to have a high number of sample recruitment, and acting as a representative facility within the Indonesian healthcare system structure. The emergency department is a 24-hour department with triage procedures, nursing practice, and communication patterns that are standardized and meet the national standards of emergency care. The study will be conducted over a four-month stretch across the period of December 2024- March 2025 to enable collection of adequate data across seasonal trends and varying patient turn-outs. Other

environmental factors in the emergency department such as physical layout, staff pattern, patient flow dynamics and policies on family accommodation were also documented to help them have a background knowledge of the care setting that may affect the anxiety of patients.

TABLE 1 Study Design and Setting Overview

Component	Details
Design	Cross-sectional analytical study
Setting	Emergency Department, RSUD Ciremai
Location	Cirebon City, West Java, Indonesia
Hospital Type	Type C referral hospital
Study Period	December 2024 - March 2025
Duration	4 months

TABLE 2 Sample Selection Criteria

Inclusion Criteria	Exclusion Criteria
Age \geq 18 years	Severe psychiatric disorders
P2 triage classification	Speech/hearing impairments
Fully conscious and oriented	Acute intoxication
Able to communicate verbally	Declined participation
Provided informed consent	Required immediate ICU transfer

Participant Recruitment and Selection Strategy

The study population penetrated all adult patients who attended the emergency department and were subsequently categorized under the P2 yellow triage level in the course of the study. The determination of the sample size was done using the existing guidelines on determining sample size in multivariate analysis research as the rule of thumb is ten subjects per independent variable and other participants were ensured to cover the possible data loss or missing data. The total sample size was 96 people, who were recruited by using systematic and purposive sampling methods that ensured all the data to be representative of different demographics and time frames. Inclusion criteria were well defined so as to subject the data to reliability and require the individuals to be aged 18 years and above, be fully awake and oriented, have the ability to express himself verbally using the Indonesian language, give informed consent to participate voluntarily in the study, and remain in P2 triage category during their stay at the emergency department. Exclusion criteria were developed to avoid confounding factors that could affect either measurement of communication capacity or anxiety scores, including acute psychopathology that might interfere with the ability to respond cognitively, sensory impairment that could interfere with the ability to hear or speak to communicate, acute intoxication or altered mental status, or patients who required reductions to intensive care units(5).

Measurement and Data Collection Instruments

A rigorous set of validated measures that measured various aspects of the patient experience and manifestation of anxiety was used in the research. Demographic data collection was completed via a structured questionnaire in which the age categories, gender identifications, levels of educational achievement, occupational status, historical emergency department experiences and present health insurance were evaluated. The assessment of therapeutic communication utilised an adapted measure of Stuart, The Communication Effectiveness Scale adapted to the setting of the emergency department and translated into Indonesian language. The scale has 20 items which are rated using a four- point Likert-type variable that has a range of never--always. The total scores have categories of effective 60-80, and ineffective 20-59 points of communication. The scale proves to be internally consistent with a Cronbach alpha of 0.81 which means that the measure is reliable in terms of gauging perceptions of communication quality.

Family support assessment was based on a modified form of the Social Support Inventory developed by House, which was specifically adapted to measure the three main categories of support: emotional support (statements of caring, empathy, and concern); informational support (given of advice, guidance, and specific information); and instrumental support (providing of tangible items of assistance with practical needs). The scale uses four-point

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Likert to score where a sum of scores is divided into high support (scores above 60), moderate support (scores in between 46-60), and the other concerned with low support (scores 45 and below). The reliability analysis indicated a Cronbach alpha of 0.84, suggesting that there was good internal consistency of the measure to use in research works(6).

Response time measurement entailed that time was systematically observed and recorded between the basics information stage (first stage of triaging) and initial meaningful contact of a patient with a nurse. Standardized timing procedures and electronic recording systems were used with trained research assistants to guarantee accuracy of measurement. Reaction times were determined as fast (within 5 minutes) and slow (greater than 5 minutes) according to the current emergency department standards and clinical practices.

Anxiety measurement was based upon the Indonesian version of State Anxiety Inventory, which has been a well-known instrument with 20 items to represent the current anxiety level instead of trait anxiety profiles. It is scored on a four-point Likert basis where scores below 20-39 on this scale are of mild anxiety, scores between 40-59 on the scale are of moderate anxiety and a score of 60-80 is of severe anxiety. The Indonesian version showed a high rate of reliability (Cronbach alpha =0.89) during pilot study on 20 participants, indicating that it will be more suitable among the target population.

Data Gathering Process and Quality Control

All data collection procedures and procedures were in accordance with standardized protocols that were aimed at maintaining regularity, precision, and comfort to the participants during the research process. Interviews and observations were performed by trained research assistants, graduate nursing students with experience in the emergency department and substantial training sessions covering instrument administration, ethical considerations and procedures in the emergency department. Participants were approached within 30 minutes of triage classification to eliminate recall bias although it gave enough time to allow initial anxiety responses to equilibrate. Interviews were realized in isolated rooms in the emergency department to ensure the confidentiality of the interviews and limit exposure to irrelevant environmental factors that may impair responses(7).

The quality assurance strategies took into account inter-rater reliability testing of observation data, frequent calibration meetings and preservation of completed instruments systematically. All data was collected during different shifts and different days of week to capture a range of different operational contexts in emergency departments and patients served by the emergency department.

Statistical analysis environment and analysis methodology

The analytical plan involved the hierarchy of strategies in analyzing the data starting with descriptive measures to bivariate associations and finally to multivariate modeling. Univariate analysis gave in-depth descriptions of the sample characteristics and the distribution of the variables in frequencies, percentages, means, and standard deviations as applicable to the type of variables. Bivariate analysis consisted of chi-square tests of association between categorical independent variables and levels of anxiety with the level of significance at alpha = 0.05.

Multivariate analysis was done using multinomial logistic regression to determine independent predictors of the level of anxiety whilst controlling other commonly occurring confounding variables. Bivariate analysis was performed, and values $p < 0.25$ were included in the multivariate analysis in order to cover the whole range of variables and potential predictors. Model assumptions were assessed and found to be adequate including but not limited to determining multicollinearity by variance inflation factors, appropriateness credence through the Hosmer-Lemeshow statistics, and the review of residuals on the basis of the model.

Ethical Issues and Protecting Partners

The study was ethically approved by the Ethics Committee of Mahardika Health Institute where all the research standards and Indonesian regulations on health care were adhered to. Informed consent procedures underlined voluntary nature of participation, the right to withdraw at any point, safeguarding the used information about confidentiality and clear description of the reason and steps of research. All the data were gathered and maintained under developed privacy protection practices with identifiers of the participants excluded to a statistical data, to maintain anonymity.

3.Results

Demographic Characteristics and Sample Characteristics

The overall demographics of the participants showed a large representation of the elderly population as the percentage of elderly participants, according to the results of the study, were very big, as compared to the other

age groups. In the population of 96 individuals included in the final analysis, the distribution by age group showed that the largest number of the participants- 58 individuals (60.4 percent) were within the 36-55 years age bracket. This observation corresponds with epidemiological trends as middle-aged adults often seek medical attention in emergency departments because of the development of chronic illnesses, work-related injuries, the manifestation of lifestyle-related health issues, etc. Youths(18-35 years) were the most (28 persons, 29.2 percent) followed by the old adults (above 55 years) (10 persons, 10.4 percent) being the lowest. The above age distribution pattern indicates that emergency department use may peak at the age range when a person is economically productive, and he/she may be subjected to higher stress levels and likely to encounter work related hazards.

Gender analysis showed that there was a significant female dominance whereby 58 participants (60.4%) identified themselves as female as compared to the 38 male participants (39.6%). Such a gender breakdown correlates with existing trends in injury studies on healthcare use, under which women have been observed to have an elevated healthcare-seeking behaviour and emergency care visit rate. It is possible that higher female rate is a sign of an increased desire to take part in research projects in healthcare, which could be the result of culture and communication preferences that ease the involvement into research.

The pattern of educational attainment revealed that most of the participants had undertaken high school education (62.5%, n=60), followed by fewer participants who had less than high school education (22.9%, n=22), and other participants who had furthered their studies past the high school level (14.6%, n=14). Such educational distribution will help form valuable context of the information regarding the levels of health literacy, communication preferences of different members of the studied population, and possible variations of the manner in which anxiety is expressed by each of them. High prevalence rates of high school-educated participants indicate a population of middle socioeconomic status with moderate knowledge of matters concerning health but could still be full of anxiety due to uncertainties about medical matters.

TABLE 3 Key Findings Summary

Factor	Effect on Anxiety	Strength of Association
Delayed Response Time	Increases moderate and severe anxiety	Strong (OR: 2.21-3.94)
Ineffective Communication	Increases severe anxiety	Moderate (OR: 2.88)
Low Family Support	Increases severe anxiety	Strong (OR: 3.67)
Gender	No significant effect	Not significant

Emergency Department service delivery indicators

The analysis of emergency department in access to services showed that there are substantial fluctuations in wait times, which are directly relevant to patient experiences/levels of anxiety. Response time analysis indicated that 56 participants (58.3%) recorded delayed response time of above 5 minutes between the triage and the initial contact with the nurse, compared with 40 participants (41.7%) whose response time was below 5 minutes indicating poor and rapid response respectively. These figures mean that there is still much to be done to enhance the efficiency of the emergency department and that most of the patients under P2 experience waiting issues that may lead to higher anxiety levels. The second outcome measure reflects high rates of delayed responses that are common in emergency departments related to workload pressures of staff members, other competing patient priorities, and resource allocations that inadvertently can affect the timely attention of patients with moderate-importance ratings(8).

The results of the therapeutic communication assessment showed worrying trends in their relationship with nurses with a majority 61 (63.5%) experiencing bad communications as opposed to 35 (36.5%) perceiving effective communications with nurses. Such a finding indicates a major gap in the emergency nursing practice having a direct impact on the psychological well-being of the patients. One or more aspects may cause poor communication such as time limitations, heavy patient loads, a lack of communication training, language barriers, and the culture of institutions that emphasize technical work over patient communication. The overwhelming nature in poor communication episodes indicates an acute need to employ specific measure to enhance nursing communication skills within the emergency scene.

Availability of family support exhibited less consistent tendencies with 55 (57.3%) and 41 (42.7%) participants recording low family and family support, respectively. Such pattern of distribution is indicative of the complicated process of family participation in emergency care, which might depend on the time of presentation, the availability

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of the family members, the challenges of transportation or the need to go to work, or the policy of the institution regarding the presence of the family members within an emergency department. The above-mentioned slight majority that experiences low family support is indicative of the necessity to develop a more systematic methodology related to the engagement and support of families within the realm of emergency care services.

Patients with the higher levels of anxiety

Anxiety assessment displayed a potential trend of increased psychological distress in the P2 triage patients, with most of them presenting moderate to high level of anxiety. The most common type of anxiety was moderate (53.1 %; 51 participants), with its number being the largest representation within the sample. This result indicates that the atmosphere at the emergency department and uncertainties involved impose a high level of psychological pressure on patients whose conditions are not currently life-threatening but are in need of acute care(9).

The presence of severe anxiety was reported in 25 (26.1%) participants, denoting that nearly a quarter of P2 patients had seriously high levels of anxiety that may inhibit the cooperation of treatment, decision-making ability, and overall outcomes of recovery. The count of severe anxiety seen among this group of people points to the necessity of systematic psychological examination and treatment guidelines in the course of care pathways in the emergency department.

The 20 respondents (20.8%) in the sample were classified as mild in the levels of anxiety. The above-mentioned finding indicates that the level of severe and moderate anxiety among the patients of P2 triage is extremely high (79.2 per cent of patients). The interesting fact is that no participants placed in the panic anxiety class suggesting that the anxiety levels were high but were still within the effective range and could probably respond to the specific intervention.

analysis of bivariate association Between variables

The non-parametric bivariate analysis showed significant statistical findings on the correspondence of some independent variables with the level of anxiety, which is valuable in terms of determining the factors that affect the psychological distress within an emergency context. Gender revealed that there was no statistically significant relationship with the level of anxiety ($p = 0.321$), so both women and men experience anxiety in the emergency department in similar patterns. This observation indicates that anxiety reactions in emergency care are less related to the gender based variations in stress response and coping behaviours but are linked directly to situationality.

The response time exhibited a significant correlation to the level of anxiety ($p = 0.011$) which proves the hypothesis that the delay in the provision of emergency care correlates with the level of distress. At least 35.0%, 50.0%, and 15.0% of the participants who received fast response times (5 minutes or less) reported mild, moderate, and severe anxiety respectively. Conversely, participants whose response time was slow (>5 minutes) exhibited worrying tendency on how few recorded mild anxiety at 10.7 % with 55.4 % registering moderate anxiety and 33.9 % reported severe anxiety. This distribution very evidently proves that the delayed care delivery is related to the severity of increased anxiety(10).

Therapeutic communication quality was significantly connected with the level of anxiety ($p = 0.037$), which confirms the necessity of adequate nurse-patient communication even in emergency situations. Effective communication in therapy showed more desirable anxiety distributions of 28.6, 51.4, and 20.0 (per cent) within mild, moderate, and severe levels of anxiety, respectively. On the other hand, ineffective communication respondents exhibited worrying trends as only 16.4 percent were mild, 54.1 percent moderate and 29.5 percent severe anxiety. This trend strengthens the composing reactive power of good communication in lessening the psychic distress.

The levels of social support showed a very strong correlation with outcomes of anxiety ($p = 0.009$), a substantiation of the importance of social support in emergency care experiences. Individuals who had a high family support demonstrated positive anxiety distribution of 31.7, 51.2, and 17.1 that were mild, moderate and severe, respectively. The lower the family support, the attached patterns became alarming in the study, with 12.7 percent of them suffering mild, 54.6 severe m and 32.7 moderate anxiety. This observation demonstrates the significance of the family-centered care in emergency medicine.

4. Conclusion

This in-depth study has effectively found the three pivotal antecedents of anxiety in P2 triage patients at the emergency department that gives substantial evidence to the multidimensionality of psychological distress in acute care facilities. The multivariate analysis strategy identified that the delayed nursing response time, inefficient

approaches to therapeutic communication, and poor family support system are the risk factors that independently contribute to high risks of developing mild to acute levels of anxiety. These results can be regarded as a significant contribution to developing our knowledge in describing the complicated interrelations of the healthcare delivery processes, interpersonal interactions, and the impact on psychological outcomes of patients in emergency medicine. The study proves that anxiety in emergency units is not a side-effect of uncertainty in medical practice but it is a contingent factor subject to intervention by means of incorporating engineering changes in the nursing practice, the communication procedures, and family engagement practices.

Evidence that these associations are causal is especially persuasive in the dose-response relationships as determined by the regression analysis. The gradual grading of odds ratios between moderate and severe anxiety indicators indicates that measures taken at such levels could not only lead to overall decrease of anxiety prevalence but also avoid the risk of escalation of psychological distress to major ones that could impede treatment cooperation and recovery outcomes. The trend of improvement in these graduated effect patterns, suggests that only limited improvement in response times, quality of communication, or family presence are required to significantly reduce the amount of patient suffering or yield patient care experience increases.

Theoretical Implications and Development of Framework

The empirical evidence following the research supports the popular stress and coping theoretical propositions and broadens their use to the sphere of emergency medical care. The substantial relationships among the aspects of environmental stressors (delayed care), cognitive challenges (communication clarity), and social resources (family support) and anxiety outcome is in line with the transactional model of stress and coping of Lazarus and Folkman. These findings indicate that patients are continually making primary appraisals to gauge the level of potential threats associated with the current ED experience, and are also running secondary appraisals to assess the coping resources and support networks that are available to reduce the stress levels.

To the extent that they demonstrate that social support and effective communication have protective value, i.e., moderate the relation between environmental stressors and psychological outcomes, the findings provide insight into the stress-buffering hypothesis. It offers theoretical reasoning upon which extensive curative-based models can be established to rehabilitate individuals on various avenues to anxiety alleviation, instead of the very limited aspects of doing so. The study indicates that emergency departments consist of highly involved social systems, wherein the concept of technical medical care interacts with interpersonal communication and family dynamics to define the psychological experience of patients, lives well beyond the immediate medical presenting complaint.

Policy and System Implications to Healthcare

Findings of the research will have profound implications on healthcare quality measurements, accreditation, and funds distribution at the institutional and policy levels. Conventional emergency department performance measures have mostly targeted clinical outcomes, throughput rates, and satisfaction rates without aiming at psychological well-being insight metrics, which can be just a significant part of the total patient care. The evidence indicates that anxiety levels are significant quality indicators and that can be used as a valid measure of efficacy when the focus of care delivery processes goes beyond medical treatments.

Hospitals and regulatory agencies that conduct health care accreditation would do well to include psychological outcome indicator in the assessment plan of an emergency department since patient anxiety variables can demonstrate essential aspects of quality care that determine the success rates of treatment and patient quality. Such addition to the number of quality metrics may encourage healthcare facilities to invest in communication skills training, patient-family support programs, and workflow streamlining initiatives that focus on the psychological needs of patients, as well as on medical treatment needs.

Decisions about resources should take into account the fact that relatively small relative investments related to communication training, family support infrastructure, and optimization of workflow may have a big impact on patient psychological outcomes. There may be a significant cost-savings to these interventions when one considers the results of prevention of patient complaints, staff turnover, and adverse events attributable to patient anxiety and non-cooperation. Healthcare administrators need to review the economic argument of investing in programs of psychological support as a mandatory part of an all-encompassing emergency care delivery, instead of an optional addition.

Future Research and Methodological improvement

Although this research was able to aspectually offer significant insights into the determinants of anxiety among P2 triage patients, there exist some pertinent research questions that were not ventilated in this research and should

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be displayed in the near future. Future research should be done longitudinally to determine the durability of the anxiety effects even after the direct emergency care experience. This would help understand the longterm psychological impact of emergency care quality and the related intervention concerns post-dis-charge. Research that needs further investigation to understand the efficacy of specific training programs focusing on communication training, family support intercession, and workflow streamlining solutions could also offer practical advice of how to bring evidence-based changes to the realms of practice.

A cross-site comparative study in anxiety patterns of various hospital types or geographic regions, as well as cross-cultural research could help increase the validity of such research and pinpoint the specific intervention needs at the population level. The present study took place in one Type C hospital in Indonesia, and the results cannot be applied to other healthcare facilities with varying resource availability, staffing, and cultural backgrounds. Multicenter studies involving novel healthcare settings would enhance the evidence and determine the common as opposed to the place-specific intervention strategies.

The methodological improvement would require the creation of such real-time anxiety monitoring instruments that could allow timely detection of patients showing an increased level of psychological distress and activate the initial automated protocols of intervention. Adding technologies, such as mobile apps that the family can use to communicate, an automated electronic patient education system, and automated monitoring of response times, could increase the viability and sustainability of evidence-based interventions regardless of financial capability.

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Conflicts of interest

The authors have no conflicts of interest to declare

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