

Journal of Patient Safety

United States | Universities and research institutions | Media Ranking

Country

United States



Subject Area and Category

Medicine

└ Public Health,
Environmental and
Occupational Health

Nursing

└ Leadership and
Management

Publisher

Lippincott Williams and
Wilkins Ltd.

SJR 2024

0.869

Q1

H-Index

49

Publication type

Journals

ISSN

15498417, 15498425

Coverage

2006-2025

Information

[Home ↗](#)

[How to publish in this journal ↗](#)

Scope

Journal of Patient Safety (ISSN 1549-8417; online ISSN 1549-8425) is dedicated to presenting research advances and field applications in every area of patient safety. While Journal of Patient Safety has a research emphasis, it also publishes articles describing near-miss opportunities, system modifications that are barriers to error, and the impact of regulatory changes on healthcare delivery. This mix of research and real-world findings makes Journal of Patient Safety a valuable resource across the breadth of health professions and from bench to bedside.

Quartiles



Find similar journals

[All quartiles](#)[All countries](#)[All subject categories](#)[Clear filters](#)[Download](#) Only Open Access Journals

1 - BMJ Quality and Safety

83%

similarity

2 - Journal of Patient Safety and Risk Management

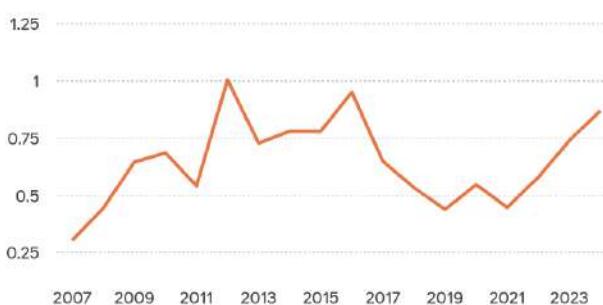
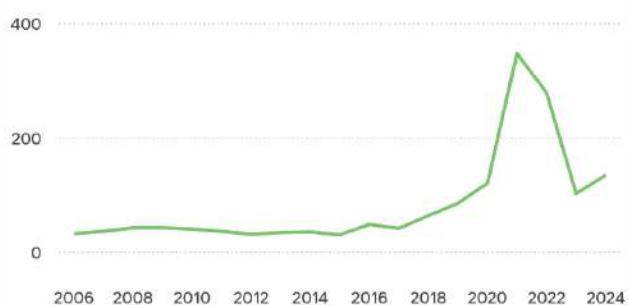
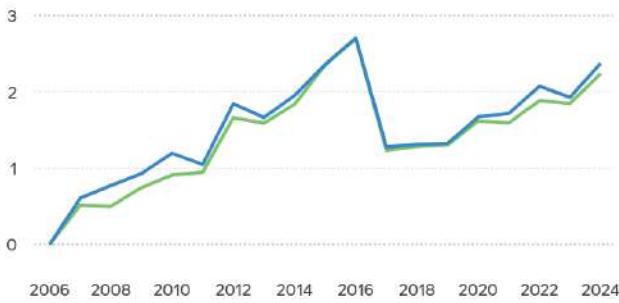
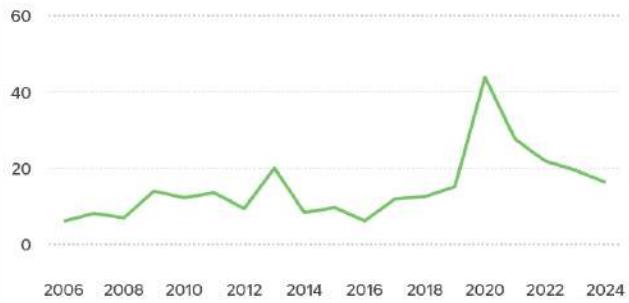
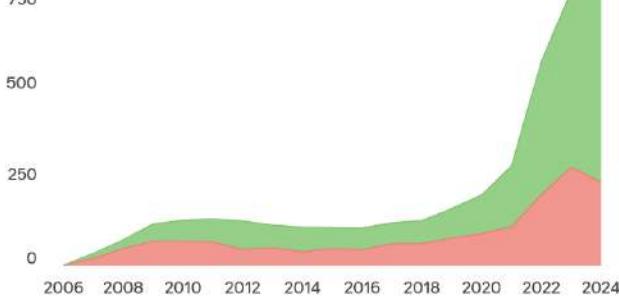
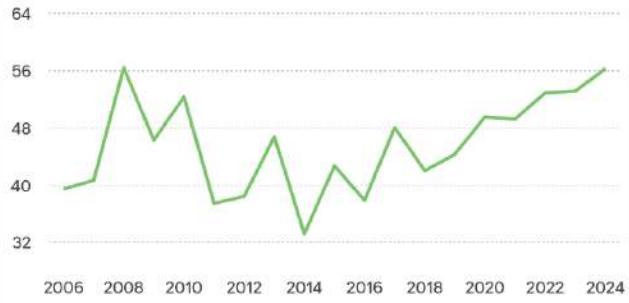
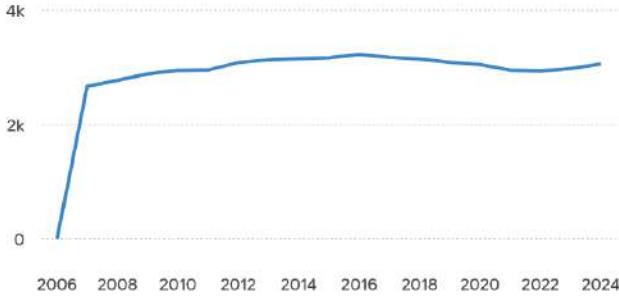
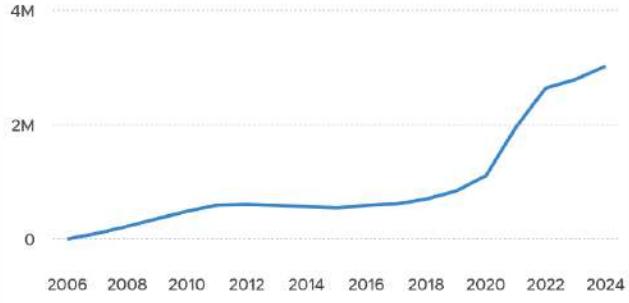
76%

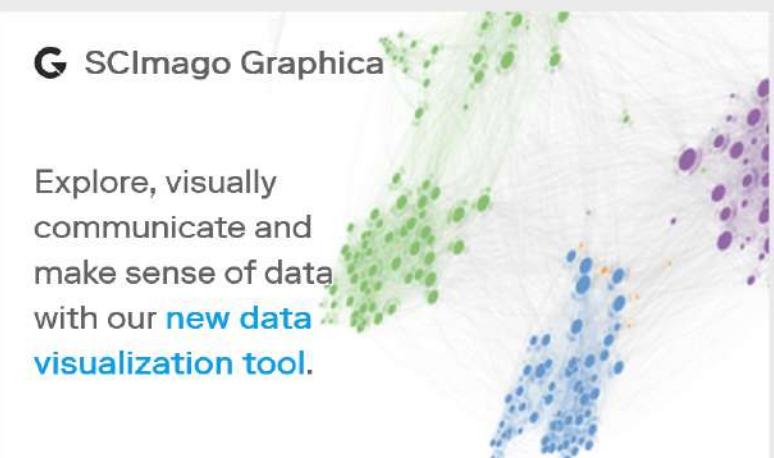
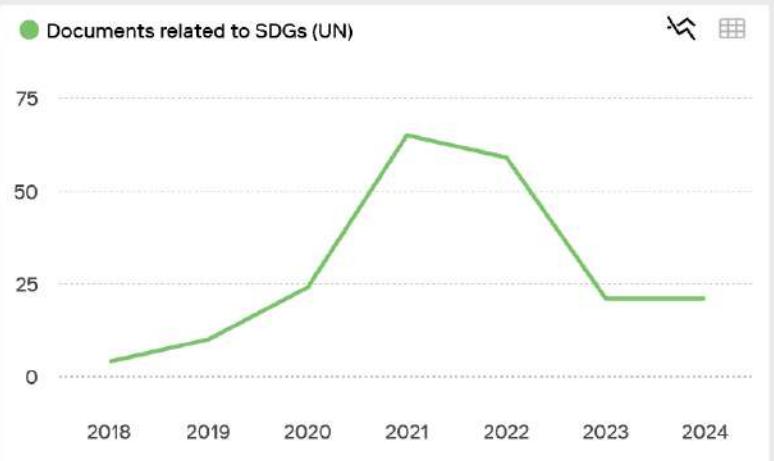
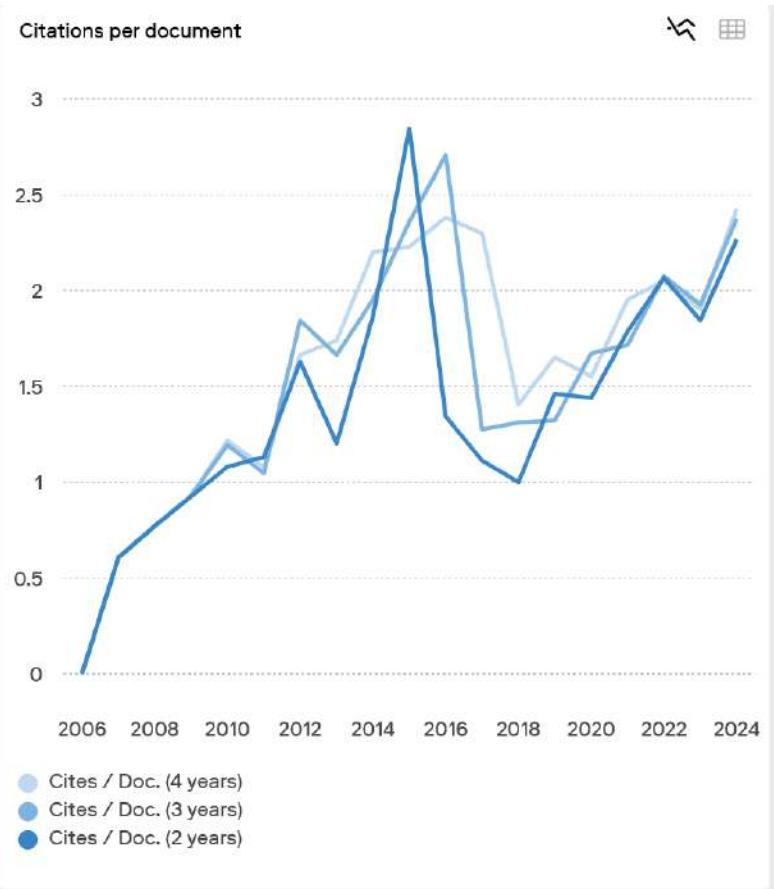
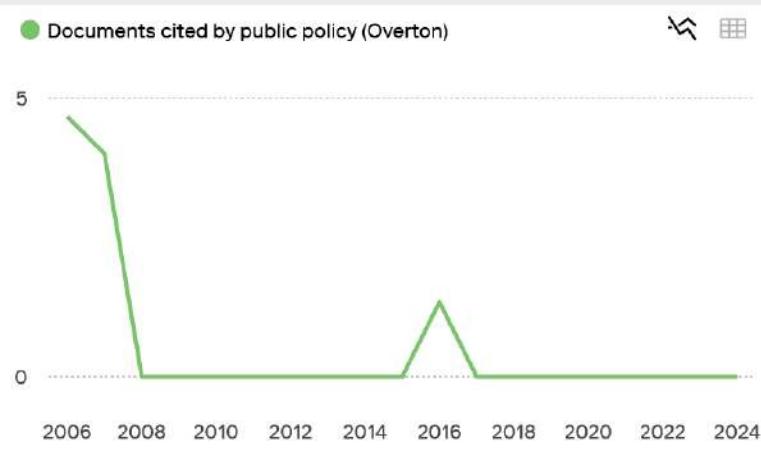
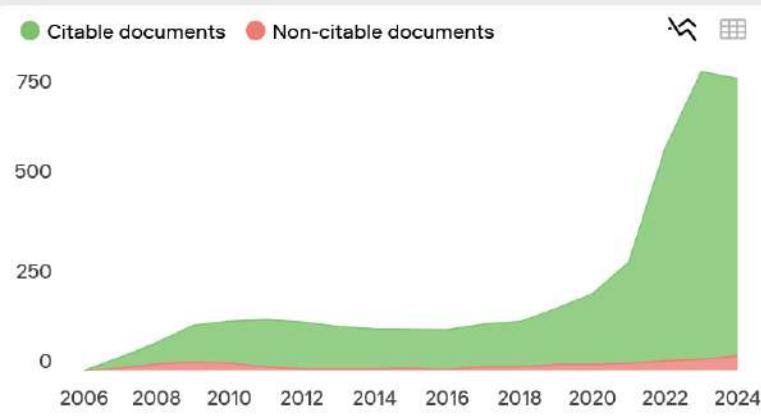
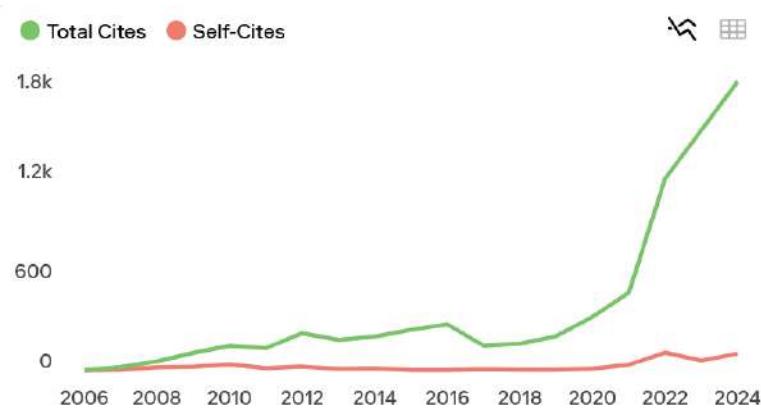
similarity

3 - Joint Commission Journal on Quality and Patient Safety

72%

similarity

< >● SJR[X](#) [grid](#)● Total Documents[X](#) [grid](#)● External Cites per Doc ● Cites per Doc[X](#) [grid](#)● % International Collaboration[X](#) [grid](#)● Cited documents ● Uncited documents[X](#) [grid](#)● % Female Authors[X](#) [grid](#)● Estimated APC[X](#) [grid](#)● Estimated financial value[X](#) [grid](#)



Editorial Board : Journal of Patient Safety

[Home](#) > Editorial Board

Editorial Board

Editor in Chief

David Westfall Bates, MD, MSc

Chief Innovation Officer

Senior Vice President

Brigham and Women's Hospital

Chief, Division of General Internal Medicine

Brigham and Women's Hospital

Medical Director of Clinical and Quality Analysis

Partners HealthCare

Boston, MA

Associate Editors

Sarah P. Slight, PhD, MPharm, PGDip, M.R.Pharm.S, M.P.S.I., FHEA, FFCI

Reader/Associate Professor in Pharmacy

School of Pharmacy

The Faculty of Medical Sciences

Newcastle University

Newcastle upon Tyne, UK

Kevin T. Kavanagh, MD, MS, FACS

Board Chairman

Health Watch USA

Somerset, KY

Gillian Janes RGN, PhD, MSc, BSc(Hons), SFHEA

Professor of Nursing and Quality Improvement/

Co-Director Health and Care Research Centre

Faculty of Health, Medicine and Social Care

Anglia Ruskin University, UK

Anne P. Ehlers, MD, MPH

Assistant Professor of Surgery

University of Michigan

Ann Arbor, MI

Editorial Board

David Classen, MS, MD

Associate Professor of Medicine
University of Utah
CMIO, Pascal Metrics

Michael R. Cohen, RPh, MS, ScD

Former President
Institute for Safe Medication Practices
Huntingdon Valley, PA

Frank Federico, RPh

Executive Director, Strategic Partners
Institute for Healthcare Improvement
Cambridge, MA

Mary E. Foley, MS, RN, PhD

Director, Center for Nursing Research and
Innovation
University of California San Francisco
School of Nursing
San Francisco, CA

**Jeanne M. Huddleston, MD, MS, FACP,
FHM**

Associate Professor of Medicine
Co-Director, Health Care Systems
Engineering
Mayo Clinic

David Hunt, MD, FACS

Medical Officer, Office of Provider
Adoption and Support Office of the
Secretary
Office of the National Coordinator
U.S. Department of Health and Human
Services
Washington, DC

Edward Kelley, PhD

Head, Strategic Programmes and
Coordinator
WHO Patient Safety
Geneva, Switzerland

Marianne Lisby, PhD,

MHSc, RN
Director of Research,
Research Center
for Emergency Medicine,
Associate Professor,
Emergency Medicine and
Patient Safety, Aarhus
University; Clinical
Specialist, Emergency
Department, Aarhus
University Hospital,
Aarhus, Denmark

Stephanie K. Mueller, MD, MPH

Associate Professor
Department of Medicine
Division of General
Internal Medicine
Brigham and Women's
Hospital
Boston, MA

**Karen Nanji, MD,
MPH**

Associate Professor
Department of
Anesthesia
Massachusetts General
Hospital
Boston, MA

Christina Olsen

Patient Champion
New Zealand

Peter Pronovost, MD,

PhD, FCCM
Chief Clinical
Transformation
and Quality Officer,

Carol Keohane, BSN, RN

Senior Vice President and Chief Quality and Safety Officer
South Shore Health
Boston, MA

Marianne Lisby, PhD, MHSc, RN

Director of Research, Research Center for Emergency Medicine, Associate Professor, Emergency Medicine and Patient Safety, Aarhus University; Clinical Specialist, Emergency Department, Aarhus University Hospital, Aarhus, Denmark

Stephanie K. Mueller, MD, MPH

Associate Professor
Department of Medicine
Division of General Internal Medicine
Brigham and Women's Hospital
Boston, MA

Karen Nanji, MD, MPH

Associate Professor
Department of Anesthesia
Massachusetts General Hospital
Boston, MA

Christina Olsen

Patient Champion
New Zealand

Peter Pronovost, MD, PhD, FCCM

Chief Clinical Transformation and Quality Officer, University Hospitals
Professor, Case Western Reserve University
School of Medicine, Frances Payne Bolton
School of Nursing
Cleveland, Ohio

Sanjay Saint, MD, MPH

Research Scientist, Ann Arbor VA Medical Center
Professor, Department of Medicine
University of Michigan Medical School
Ann Arbor, MI

University Hospitals

Professor, Case Western Reserve University
School of Medicine,
Frances Payne Bolton School of Nursing
Cleveland, Ohio

Sanjay Saint, MD, MPH

Research Scientist, Ann Arbor VA Medical Center
Professor, Department of Medicine
University of Michigan Medical School
Ann Arbor, MI

J. Bryan Sexton, MA, PhD

Associate Professor
Director of Patient Safety Research & Training
Duke University Health System

Kaveh G. Shojania, MD

Vice Chair of Quality and Innovation
University of Toronto
Toronto, Canada

Eric J. Thomas, MD, MPH

Professor of Medicine
University of Texas - Houston Medical School
Houston, TX

Richard D. Urman, MD, MBA, CPE

Chair of Anesthesia
The Ohio State University
Columbus, OH

Rupa S. Valdez, PhD
Professor, Systems and
Information Engineering
Public Health Sciences
Global Studies
University of Virginia
Charlottesville, VA

Charles Vincent, PhD
Emeritus Professor of
Clinical Safety Research
Imperial College London
London, England

Nicole Werner, PhD
Associate Professor of
Anesthesiology and
Biomedical Informatics
Vanderbilt University
School of Medicine
Director, Center for
Research and Innovation
in Systems Safety
Vanderbilt University
Medical Center
Nashville, TN

[^Back to Top](#)

August 2022 - Volume 18 - Issue 5 : Journal of Patient Safety

[Home](#) > August 2022 - Volume 18 - Issue 5

[Previous Issue](#) | [Next Issue](#)



August 2022 - Volume 18 - Issue 5

pp: 377-511,e822-e899

[Table of Contents Outline](#)

[eTOC Alerts](#)

[Contributor Index](#)

Original Articles

[Observation and Patients' Perceptions of Incorporating Their Photograph Into the Electronic Health Record](#)

Reuland, Brian D.; Redman, Chelsea T.; Kneifati-Hayek, Jerard Z.; More

Journal of Patient Safety. 18(5):377-381, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Buy](#)

[The Korea National Patient Safety Incidents Inquiry Survey: Characteristics of Adverse Events Identified Through Medical Records Review in Regional Public Hospitals](#)

Kim, Min Ji; Seo, Hee Jung; Koo, Hong Mo; More

Journal of Patient Safety. 18(5):382-388, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Open](#)

[The Korea National Patient Safety Incidents Inquiry Survey: Feasibility of Medical Record Review for Detecting Adverse Events in Regional Public Hospitals](#)

Kim, Min Ji; Seo, Hee Jung; Koo, Hong Mo; More

Journal of Patient Safety. 18(5):389-395, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Open](#)

[Feasibility of Capturing Adverse Events From Insurance Claims Data Using International Classification of Diseases, Tenth Revision, Codes Coupled to Present on Admission Indicators](#)

Kim, Juyoung; Choi, Eun Young; Lee, Won; More

Journal of Patient Safety. 18(5):404-409, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)

- [Permissions](#)
- [Open](#)
- [SDC](#)

Capturing Parents' Perspectives of Child Wellness to Support Identification of Acutely Unwell Children in the Emergency Department

Albutt, Abigail; Roland, Damian; Lawton, Rebecca; More

Journal of Patient Safety. 18(5):410-414, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Open](#)

Feelings of Trust and of Safety Are Related Facets of the Patient's Experience in Surgery: A Descriptive Qualitative Study in 80 Patients

Occelli, Pauline; Mougeot, Frédéric; Robelet, Magali; More

Journal of Patient Safety. 18(5):415-420, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Buy](#)

Development and Adjustment of an Algorithm for Identifying Drug-Related Hospital Admissions in Pediatrics

Schulze, Christopher; Toni, Irmgard; Moritz, Katrin; More

Journal of Patient Safety. 18(5):421-429, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Buy](#)

Free-Text Computerized Provider Order Entry Orders Used as Workaround for Communicating Medication Information

Kandaswamy, Swaminathan; Grimes, Joanna; Hoffman, Daniel; More

Journal of Patient Safety. 18(5):430-434, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)
- SDC

High-Risk Medication in Home Care Nursing: A Delphi Study

Dumitrescu, Irina; Casteels, Minne; De Vliegher, Kristel; More

Journal of Patient Safety. 18(5):435-443, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)
- SDC

Strength of Safety Measures Introduced by Medical Practices to Prevent a Recurrence of Patient Safety Incidents: An Observational Study

Müller, Beate S.; Lüttel, Dagmar; Schütze, Dania; More

Journal of Patient Safety. 18(5):444-448, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)

Safety Attitude of Operating Room Personnel Associated With Accurate Completion of a Surgical Checklist: A Cross-sectional Observational Study

Sens, Florence; Viprey, Marie; Piriou, Vincent; More

Journal of Patient Safety. 18(5):449-456, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)
- SDC

Evaluating Potentially Inappropriate Medications in Older Kidney Transplant Recipients

Cohen, Elizabeth A.; DeVietro, Lena M.; Richardson, Brock A.; More

Journal of Patient Safety. 18(5):457-461, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)

Postdischarge Adverse Events Among Neonates Admitted to the Neonatal Intensive Care Unit

Tsilimingras, Dennis; Natarajan, Girija; Bajaj, Monika; More

Journal of Patient Safety. 18(5):462-469, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)

Building Consensus for a Shared Definition of Adverse Events: A Case Study in the Profession of Dentistry

Franklin, Amy; Kalenderian, Elsbeth; Hebballi, Nutan; More

Journal of Patient Safety. 18(5):470-474, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)
- [Buy](#)

Applying Healthcare Failure Mode and Effect Analysis and the Development of a Real-Time Mobile Application for Modified Early Warning Score Notification to Improve Patient Safety During Hemodialysis

Lin, Chang-Hung; Ho, Tsing-Fen; Chen, Hui-Fen; More

Journal of Patient Safety. 18(5):475-485, August 2022.

- [Abstract](#)

- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Open](#)

Patient Safety Culture in Dentistry Analysis Using the Safety Attitude Questionnaire in DKI Jakarta, Indonesia: A Cross-Cultural Adaptation and Validation Study

Juliawati, Mita; Darwita, Risqa R.; Adiatman, Melissa; More

Journal of Patient Safety. 18(5):486-493, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Open](#)

Development of a Quality Improvement Dental Chart Review Training Program

Kalenderian, Elsbeth; Hebballi, Nutan B.; Franklin, Amy; More

Journal of Patient Safety. 18(5):e883-e888, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Buy](#)
- [Open](#)

Identification of Inappropriate Antibiotic Orders During Implementation of a Multidisciplinary Antimicrobial Stewardship Program Within the Primary Care Setting

Singh-Franco, Devada; Hosein Mohammed, Sheerida; Eckardt, Paula A.; More

Journal of Patient Safety. 18(5):e889-e894, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)
- [Buy](#)
- [Open](#)

Should Pharmacists Lead Medication Reconciliation in Critical Care? A One-Stem Interventional Study in an Egyptian Intensive Care Unit

El Hadidi, Seif; Hamdi, Mohamed; Sabry, Nirmeen

Journal of Patient Safety. 18(5):e895-e899, August 2022.

- [Abstract](#)
- [Favorite](#)
- PDF
- [Permissions](#)

- [Buy](#)
- SDC

-

[Table of Contents](#) [Outline](#) | [Back to Top](#)

□ Tips for Success

[Developing Methods to Support Collaborative Learning and Co-creation of Resilient Healthcare—Tips for Success and Lessons Learned From a Norwegian Hospital Cancer Care Study](#)

Bergerød, Inger Johanne; Clay-Williams, Robyn; Wiig, Siri

Journal of Patient Safety. 18(5):396-403, August 2022.

- [Abstract](#)
- [Favorite](#)
- [PDF](#)
- [Permissions](#)

- [Open](#)

[Table of Contents](#) [Outline](#) | [Back to Top](#)

- [1](#)
- [2](#)
-

Show 20 results per page ▾ Show:

20 results per page



^Back to Top

OPEN

Patient Safety Culture in Dentistry Analysis Using the Safety Attitude Questionnaire in DKI Jakarta, Indonesia: A Cross-Cultural Adaptation and Validation Study

Mita Juliawati, MHA,* Risqa R. Darwita, PhD,† Melissa Adiatman, PhD,† and Fatma Lestari, MSi, PhD‡

Objectives: This study aimed to analyze a cross-cultural adaptation of the Safety Attitude Questionnaire (SAQ) for Indonesian dentists.

Methods: A cross-sectional study was conducted on 250 general dentists in health services in Jakarta, Indonesia. The first step included cultural adaptation and translation, which was followed by the development of the tested questionnaire through expert agreement and by validity and reliability analysis using Spearman correlation coefficient, Cronbach α , and interclass correlation coefficient. The SAQ consisted of 30 items and 6 dimensions (safety climate, teamwork climate, job satisfaction, stress recognition, perception of management, and working conditions).

Respondents were members of the Indonesian Dental Association who voluntarily filled out a Google-based questionnaire from September to October 2020.

Results: A total of 250 respondents with a response rate of 16.4% demonstrated a total Cronbach α value of 0.897, whereas the value per item ranged from 0.890 to 0.905, which suggested an acceptable and good to very good internal consistency. The interclass correlation coefficient value varied from 0.840 to 1.000, which meant almost perfect agreement. The correlation coefficient of 30 questions items resulted in a total SAQ score ranging from 0.422 to 0.699 (moderate to strong correlation) and between 6 dimensions to total SAQ score ranging from 0.648 to 0.772 (strong correlation).

Conclusions: The Indonesian version of the SAQ exhibited good validity and very good reliability and potential to be used for evaluating dentists' patient safety culture in Indonesia.

Key Words: Indonesia, patient safety, safety culture, validation study, dentists

(*J Patient Saf* 2022;18: 486–493)

Safety has become a worldwide issue, especially in health services.¹ Data on unexpected incidents or adverse events in various countries have led to patient safety systems being created.^{2,3} Several reviews have shown that patient safety incidents are caused by human behavior and can cause permanent damage² with costly consequences.^{3,4}

The situation has been exacerbated by the global COVID-19 pandemic, where doctors and medical personnel are regarded as high-risk professions.⁵ As of October 2020, more than 200 countries have been infected, and total confirmed and new cases were 39,596,858

and 389,683, respectively, and deaths cases were 1,107,374; in Indonesia, total cases were 357,762, with 12,431 dead.⁶

In dentistry, dentists and dental therapists are at high risk of cross-infection and can be the first contact persons because they have close interactions with patients who are potential sources of infection.⁷ Thus, all parties should take standard precautions, especially regarding the implementation of the universal precaution from the World Health Organization.⁸ This shows the importance of patient safety cultural factors, especially for medical personnel.⁵

Patient safety is fundamental to provide high-quality dental care.^{2,9} Dentists and dental institutions are committed to providing excellent care, where one of the most important factors is safety. Some literature^{1,2} have described that errors can also occur in dentistry.^{2,10} Factors that can cause injury include fatigue, inexperience, poor supervision, wrong procedures, and a low safety culture.²

To prevent errors, a patient safety culture should be implemented.¹¹ Increasing patient safety culture in primary and secondary healthcare facilities builds public trust.¹¹ Early research on patient safety culture focused primarily on secondary healthcare such as hospitals. It is now necessary to examine patient safety culture in primary health care because 85% of healthcare professionals are in primary care facilities.^{12,13} Therefore, it is crucial to study patient safety culture factors for dentists and correct the absence of investigations of patient safety culture in dental services in Indonesia, especially in primary health services.

Several tools to measure the perception of respondents are available. They combine elements of various dimensions of patient safety culture, such as the Safety Attitude Questionnaire (SAQ).^{14–16} It was first developed by Sexton et al more than 2 decades ago at Texas University, United States, and it has been modified by researchers from the United States, Europe, and Asia, including states and countries such as Texas, Sweden, Norway, Germany, Denmark, Albania, China, Taiwan, Oman, and Georgia.^{15–24}

The questionnaire was adapted from the short version of the original SAQ, which consists of 30 items and 6 dimensions of safety culture (safety climate, teamwork climate, job satisfaction, stress recognition, perception of management, and working conditions).^{15,16,21,25} The SAQ is the most commonly used and rigorously validated tool for measuring the safety climate in health care²¹ and is also the most suitable for evaluating safety culture in primary and secondary health services, with the potential for large-scale implementation and appropriate for quantitative research.^{15,25} The original English version of the SAQ was obtained from a previous publication.¹⁶ Among the various SAQ versions, the SAQ Chinese version was chosen because it fits the original SAQ template—generic short form, and Asian cultures are expected to obtain the same good results.²¹ The Indonesian version of SAQ is applied to outpatient services in primary health care in accordance with previous studies for the SAQ-Ambulatory version.^{15,22,26}

Until now, there is no instrument to measure patient safety culture in dentistry. Therefore, this study aims to analyze a cross-cultural adaptation of the SAQ for Indonesian dentists.

From the *Graduate School, Doctoral Study Programme, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia; †Department of Dental Public Health and Preventive Dentistry, Faculty of Dentistry, Universitas, Indonesia, Jakarta, Indonesia; ‡Occupational Health and Safety Department, Faculty of Public Health, Universitas Indonesia, Depok Indonesia.

Correspondence: Mita Juliawati, MHA, Department of Dental Public Health and Preventive Dentistry, Faculty of Dentistry, Universitas Indonesia, Jl. Salemba Raya 4, Jakarta, Indonesia (e-mail: mitajuliawati@yahoo.com); (e-mail: mitajuliawati@gmail.com).

Copyright © 2022 The Author(s). Published by Wolters Kluwer Health, Inc. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

METHODS

Study Design

The research design was analytic observational with a cross-sectional approach, and it used the quantitative method.²⁷ The adaptation process followed modified cross-cultural adaptation principles from previous literature.^{15,28} The initial stage was the investigation of the conceptual and equivalence accuracy of SAQ's items and adjustments to the literature review. Then, the original English version of SAQ was translated by bilingual dentists and professionals into Indonesian. Translations were assessed and revised by a panel of experts with bilingual skills regarding either the concept of domains or suitability items against the original version. The panel consisted of a dentist and a public health researcher who were familiar with the patient safety questionnaire. The next stage included creating a synthesized back-translated version by sworn professional translators with backgrounds in dentistry and by international graduate dentists with bilingual skills.^{28,29} Subsequently, a review of the synthesized translated version and the back-synthesized version was reviewed by a committee of experts,^{28,30} which consisted of experts in the field of dentistry and public health who were bilingual and who understood patient safety culture to ensure that the items were translated correctly and were relevant.^{28,29} Later, the synthesized translated version was tested to determine if the questionnaire items could be understood.^{28,31} Because of COVID-19, all the aforementioned stages were performed online via Google Form, Zoom, and WhatsApp media. Furthermore, the new instrument was evaluated in terms of semantic adjustments through a final consensus, followed by testing for validity and reliability using recognized statistical methods.^{21,28}

The study was approved by the Ethics Committee of Dentistry Faculty Universitas Indonesia (No. 13/Ethical-Approval/FKG UI/VII/2020) and received permission and recommendation from the Executive Board of the Indonesian Dental Association (IDA; No. 2697/PB PDGI/Recommendations/II-5/2020).

Data Collection

Considering the situation in Indonesia during the COVID-19 Pandemic, the research was conducted online using Google Form, and the link was shared through the online-based network from IDA via WhatsApp, Facebook, the IDA Web site, and its Instagram account. The study was conducted in the DKI Jakarta area for 4 weeks in September and October 2020, and 250 general dentists were sampled. All respondents who received the link filled out the

informed consent form before going on to complete the questionnaire (Fig. 1).

The core version of the SAQ in short form, which consisted of 6 domains and 30 questionnaire items, was adapted from the English version and adjusted to the Chinese version, then translated into the Indonesian version. The version of the back translation was as illustrated in Tables 2 and 4.^{16,21,25} The SAQ uses a Likert scale from 1 to 5 (strongly disagree, disagree slightly, neutral, agree slightly, and agree strongly). The sum of the Likert scale from questionnaire items is the total score. The higher the score, the higher the safety culture. All are positive sentences except for items 2 and 11.^{16,21,32}

Additional questions were used to assess demographic information and determine respondent characteristics (i.e., sex, age, health facility type, practice area, number of patients worked on per day, duration of practice, IDA membership, last education, have attended a workshop about patient safety and ownership of a valid registration certificate, and a valid practical license).

The population included members of the IDA in DKI Jakarta. The sample constituted of those who voluntarily filled the Google-based questionnaire from September to October 2020. The sample size estimate shows that minimum sample size was 212 and total sample size was 250 respondents. They have met the inclusion criteria for the required sample size.³¹ A *P* values <0.05 indicated statistical significance with a power of 80%, assuming an effect size of 0.03. For interclass correlation coefficient (ICC) calculation, we used a subsample of 40 respondents. The inclusion criteria were general dentists practicing in primary and secondary health facilities in the DKI Jakarta area. The exclusion criterion was double entry.

Data Analysis

Data from Google Form were retrieved and transferred into SPSS data file format. Data analysis was conducted using IBM SPSS Statistic version 23 (IBM, Armonk, New York). The negative score items were reversed before analysis as follows: "In this clinical area, it is difficult to speak if I see problems with patient care," and "In this clinical area, it is difficult to discuss errors."^{16,21} Validity and reliability tests using Cronbach α , corrected item total correlation (CITC), ICC, and Spearman coefficient correlation were conducted.^{16,21}

RESULTS

In all, 281 dentists in DKI Jakarta answered the Google Form questionnaire after sharing it online to 1719 respondents, but only 250 were valid. Thirty-one responses were invalid because of double entry. The response rate was 16.4%. Forty of 250 dentist were

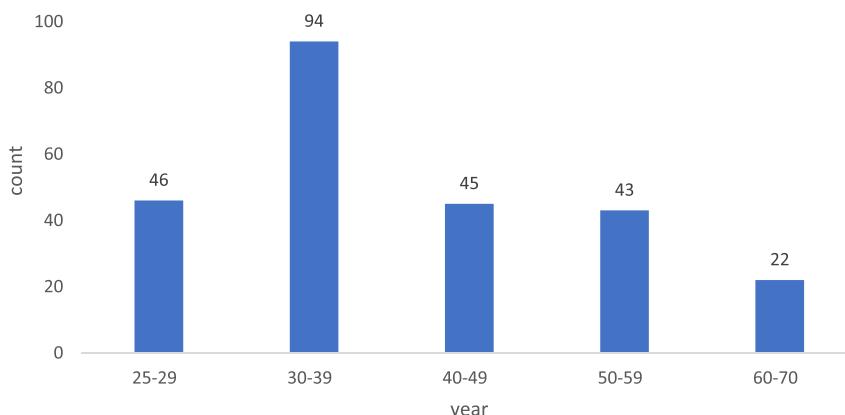


FIGURE 1. Age diagram of respondents in Jakarta Province (n = 250).

TABLE 1. Demographic Characteristics of Respondents in Jakarta Province (n = 250)

Variable	Category	Frequency	%
Age, y	25–29	46	18.4
	30–39	94	37.6
	40–49	45	18.0
	50–59	43	17.2
	60–70	22	8.8
Sex	Man	44	17.6
	Woman	206	82.4
Type of health facilities	Primary health facilities	193	77.2
	Secondary health facilities	57	22.8
Practice area	Urban	236	94.4
	Rural	14	5.6
No. patients worked on per day	None	9	3.6
	1–10	207	82.8
	11–20	27	10.8
	21–30	5	2.0
	>30	2	0.8
Duration of practice, y	1–5	81	32.4
	6–10	44	17.6
	11–15	41	16.4
	16–20	26	10.4
	>20	58	23.2
Membership of IDA District	IDA West Jakarta	71	28.4
	IDA Central Jakarta	70	28.0
	IDA South Jakarta	52	20.8
	IDA East Jakarta	44	17.6
	IDA North Jakarta	13	5.2
Last education	Undergraduate	188	75.2
	Graduate/Master	52	20.8
	Doctorate	7	2.8
	Others	3	1.2
Have attended a seminar/training about patient safety	Ever	184	73.6
	Never	66	26.4
Ownership of a valid registration certificate	Yes	247	98.8
	No	3	1.2
Ownership of a valid practical license	Yes	235	94.0
	No	15	6.0

selected for ICC analysis. Demographic data in Table 1 show that 82.4% of the respondents were female dentists. Furthermore, most were 30 to 39 years of age, 77.2% practiced in primary health facilities, and 22.8% practiced in hospitals. Approximately 94.4% of these dentists practiced in urban areas, and only 5.6% practiced in rural areas. The number of patients treated per day was 82.4%, with a maximum of 10 patients. Only 1.2% worked on more than 30 patients per day. Thirty-two percent of respondents had practiced for a maximum of 5 years, 23% for more than 20 years, and at least 10% for 16 to 20 years. The least number of respondents (5%) was from North Jakarta, and other Jakarta areas almost had the same percentage. The majority of respondents (75.2%) achieved undergraduate education, 20.8% were master graduates,

and only 0.3% were doctoral graduates. Nearly 73.6% of respondents in DKI had attended seminars on patient safety. The majority of respondents had a valid registration certificate (98.8%) and practice license (94%).

The reliability assessment demonstrated a total Cronbach α for the 30 items of 0.897, and the total Cronbach α for 6 domains was 0.727 (Table 3). The aforementioned results illustrate that the internal consistency category was acceptable ($0.7 \leq \alpha \leq 0.8$), good ($0.8 \leq \alpha \leq 0.9$), and excellent/very good ($\alpha \geq 0.9$). These conditions suggest that the questionnaire is reliable. The CITC value of 30 items varied, with the majority of items being greater than 0.3, except for certain items, and was below the minimum limit for stress domain (Tables 2, 3). This was in accordance with previous results.^{16,19,21,32}

Tables 2 and 3 show that the respondents' ICC values varied from 0.9 to 1.0 or perfect agreement (0.81–1.00). In this study, more than 90% of the results were almost perfectly correlated. Therefore, the questionnaire was reliable and stable.

In this study, the construct validity test was performed with Spearman correlation. First, the normality test was applied by using the one-sample Kolmogorov-Smirnov test. Item distribution was not normal. Table 4 indicates that each item has a strong correlation with the total score. The construct validity test results revealed that most item variables had moderate to strong correlation ($r = 0.422$ – 0.699). Each item also had a strong correlation with its dimension, such as the job satisfaction dimension, with five items in the job satisfaction column exhibiting very strong correlation (0.798–0.895). The stress recognition dimension with its 4-item column showed a strong to very strong correlation (0.783–0.836). Results revealed that all dimensions had a strong to very strong relationship with the item, suggesting that validity was good. Table 5 presents the strong correlation between the dimension and the total score and between all dimensions except for stress. This finding was consistent with previous studies.^{16,19,21,32} Overall analysis results suggest that questionnaire items, dimension, and total score were good and valid for the Indonesian version of the SAQ.

DISCUSSION

This study was a cross-cultural adaptation of the original SAQ, which has been modified from the Chinese version and which has been validated for use by Indonesian dentists in Jakarta. Demographic data showed that the majority of respondents were female dentists and that those who practiced in primary health facilities dominated (77.2%), with the remainder practicing in secondary health facilities. This was consistent with previous research on healthcare workers that have indicated that many dentists were in primary health facilities and the importance of patient safety in dentistry in such facilities^{4,11,12}. The majority of respondents practiced in urban areas, and only 5.6% worked in rural areas. On average, general dentist respondents had an undergraduate background and had practice experience ranging from at least 5 to more than 20 years. The experience of attending seminars or training on patient safety also predominated among respondents. This result suggested that they could understand the contents of the patient safety culture questionnaire. In accordance with the inclusion criteria, professional dentist must have a valid registration certificate and practical license, and most satisfied these requirements (98.8%).

Discussing data collection in online research during a COVID-19 pandemic includes both advantages and disadvantages. The research was more efficient and low cost, but not all target respondents were reached because of their social media use trends. For example, dentists who rarely read messages via groups, senior dentists who do not understand social media, and dentists who

TABLE 2. Results of Cronbach α , CITC, and ICC Analysis of Respondent Data in DKI Jakarta Province

Domain	Item	α Cronbach if Item Deleted (n = 250)	α Cronbach Total (n = 250)	CITC (n = 250)	ICC (n = 40)
Teamwork climate	1. Nurse input is well received in this clinical area.	0.893	0.897	0.521	0.990
	2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	0.897		0.297	0.953
	3. Disagreements in this clinical area are appropriately resolved.	0.891		0.674	0.900
	4. I have the support I need from other personnel to care for patients.	0.890		0.677	1.000
	5. It is easy for personnel in this clinical area to ask questions when there is something that they do not understand.	0.891		0.609	1.000
	6. The physicians and nurses here work together as a well-coordinated team.	0.890		0.638	0.968
Safety climate	7. I would feel safe being treated here as a patient.	0.890		0.691	0.980
	8. Medical errors are handled appropriately in this clinical area.	0.893		0.533	0.957
	9. I know the proper channels to direct questions regarding patient safety in this clinical area.	0.891		0.603	0.985
	10. I receive appropriate feedback about my performance.	0.890		0.630	0.955
	11. I receive appropriate feedback about my performance.	0.895		0.369	1.000
	12. I am encouraged by my colleagues to report any patient safety concerns I may have.	0.891		0.585	0.978
Job satisfaction	13. The culture in this clinical area makes it easy to learn from the errors of other.	0.890		0.628	0.981
	14. I like my job.	0.893		0.496	0.980
	15. Working in this hospital is like being part of a large family.	0.891		0.606	1.000
	16. This is a good place to work.	0.889		0.709	0.989
	17. I am proud to work in this clinical area.	0.890		0.674	0.992
	18. Morale in this clinical area is high.	0.891		0.644	0.990
Stress recognition	19. When my workload becomes excessive, my performance is impaired.	0.903		0.046	0.849
	20. I am less effective at work when fatigued.	0.904		0.025	0.840
	21. I am more likely to make errors in tense or hostile situations.	0.905		-0.021	0.846
	22. Fatigue impairs my performance during emergency situations.	0.905		-0.025	0.849
	23. Management supports my daily efforts.	0.891		0.640	0.990
	24. Management does not knowingly compromise the safety of patients.	0.902		0.187	0.979
Perception of management	25. I get adequate, timely information about events in the hospital that might affect my work from the unit management.	0.892		0.536	0.986
	26. The levels of staffing in this clinical area are sufficient to handle the number of patients.	0.892		0.533	0.992
	27. This hospital does a good job of training new personnel.	0.891		0.563	0.992
	28. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	0.891		0.606	0.982
	29. Trainees in my discipline are adequately supervised.	0.891		0.569	1.000
	30. Problem personnel in this clinical area are dealt with constructively by our management.	0.891		0.568	0.987

n = 40 from DKI Jakarta subsample.

TABLE 3. Results of Cronbach α Analysis of Total and 6 Domains, and CITC and ICC Data of Respondents in DKI Jakarta Province

Domain Item	α Cronbach if Item Deleted (n = 250)	α Cronbach Total (n = 250)	CITC (n = 250)	ICC (n = 40)
Teamwork climate	0.620	0.727	0.679	0.991
Safety climate	0.597		0.715	0.990
Job satisfaction	0.644		0.620	0.993
Stress recognition	0.863		-0.169	0.845
Management perception	0.658		0.621	0.993
Working condition	0.659		0.586	0.998

n = 40 from DKI Jakarta subsample.

do not use social media. Furthermore, online research may have led to more unbiased results because researchers cannot engage directly with respondents compared with face-to-face questionnaires. Therefore, the response rate for online data collection would be lower than face-to-face methods.^{33,34}

Furthermore, this research was used to identify potential problems contained in the questionnaire, such as misunderstandings about the

meaning of the desired item and clarity. The importance of a research was carried out based on previous research methods.^{15,21,28}

The results proved that the psychometric properties of the Indonesian version of SAQ were valid and reliable. The reliability test with Cronbach α illustrated that the internal consistency category ranged from good to excellent, where, in previous studies, the value range was 0.56 to 0.89.^{18,20-22,32,35} This study demonstrated

TABLE 4. Overview of the Correlation Between Items With Domains and Items With Total Score as the Result of Construct Validity Analysis

Domain	Item	Total Score	Spearman Correlation (n = 250)					
			Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Teamwork climate	1. Nurse input is well received in this clinical area.	0.422*	0.607*	0.385*	0.333*	-0.051	0.210*	0.280*
	2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	0.439*	0.680*	0.460*	0.352*	-0.250*	0.269*	0.380*
	3. Disagreements in this clinical area are appropriately resolved.	0.599*	0.730*	0.579*	0.454*	-0.110	0.362*	0.441*
	4. I have the support I need from other personnel to care for patients.	0.678*	0.759*	0.560*	0.494*	-0.021	0.369*	0.398*
	5. It is easy for personnel in this clinical area to ask questions when there is something that they do not understand.	0.606*	0.727*	0.500*	0.451*	0.021	0.294*	0.372*
	6. The physicians and nurses here work together as a well-coordinated team	0.612*	0.717*	0.481*	0.453*	0.026	0.360*	0.363*
Safety climate	7. I would feel safe being treated here as a patient.	0.660*	0.576*	0.669*	0.516*	-0.095	0.436*	0.474*
	8. Medical errors are handled appropriately in this clinical area.	0.611*	0.530*	0.683*	0.415*	-0.028	0.394*	0.411*
	9. I know the proper channels to direct questions regarding patient safety in this clinical area.	0.601*	0.492*	0.752*	0.451*	-0.125 [†]	0.349*	0.508*
	10. I receive appropriate feedback about my performance.	0.606*	0.509*	0.730*	0.471*	-0.169*	0.444*	0.527*
	11. I receive appropriate feedback about my performance.	0.501*	0.488*	0.660*	0.431*	-0.259*	0.312*	0.486*
	12. I am encouraged by my colleagues to report any patient safety concerns I may have.	0.536*	0.429*	0.677*	0.405*	-0.091	0.303*	0.365*
	13. The culture in this clinical area makes it easy to learn from the errors of other.	0.602*	0.466*	0.705*	0.446*	-0.106	0.341*	0.513*
	14. I like my job	0.489*	0.388*	0.359*	0.798*	-0.149 [†]	0.375*	0.315*

(Continued next page)

TABLE 4. (Continued)

Domain	Item	Spearman Correlation (n = 250)						
		Total Score	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Job satisfaction	15. Working in this hospital is like being part of a large family.	0.615*	0.451*	0.448*	0.863*	-0.104	0.385*	0.385*
	16. This is a good place to work.	0.699*	0.523*	0.601*	0.866*	-0.121	0.451*	0.528*
	17. I am proud to work in this clinical area.	0.679*	0.517*	0.547*	0.895*	-0.106	0.455*	0.440*
	18. Morale in this clinical area is high.	0.636*	0.531*	0.546*	0.835*	-0.128*	0.352*	0.405*
Stress recognition	19. When my workload becomes excessive, my performance is impaired.	0.172*	-0.067	-0.119	-0.102	0.783*	-0.030	-0.134*
	20. I am less effective at work when fatigued.	0.200*	-0.037	-0.085	-0.085	0.836*	-0.075	-0.188*
	21. I am more likely to make errors in tense or hostile situations.	0.121	-0.110	-0.165*	-0.138†	0.801*	-0.048	-0.185*
	22. Fatigue impairs my performance during emergency situations.	0.131*	-0.144*	-0.142*	-0.140†	0.813*	-0.094	-0.181*
Perception of management	23. Management supports my daily efforts.	0.604*	0.458*	0.483*	0.576*	-0.146*	0.645*	0.520*
	24. Management does not knowingly compromise the safety of patients.	0.304*	0.154*	0.151*	0.202*	-0.054	0.697*	0.190*
	25. I get adequate, timely information about events in the hospital that might affect my work from the unit management.	0.571*	0.393*	0.488*	0.446*	-0.109	0.662*	0.532*
	26. The levels of staffing in this clinical area are sufficient to handle the number of patients.	0.556*	0.433*	0.450*	0.360*	-0.025	0.624*	0.478*
Working condition	27. This hospital does a good job of training new personnel.	0.554*	0.355*	0.517*	0.380*	-0.175*	0.453*	0.847*
	28. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	0.573*	0.394*	0.512*	0.395*	-0.120	0.486*	0.728*
	29. Trainees in my discipline are adequately supervised.	0.535*	0.386*	0.506*	0.377*	-0.195*	0.391*	0.802*
	30. Problem personnel in this clinical area are dealt with constructively by our management.	0.573*	0.444*	0.456*	0.430*	-0.162†	0.487*	0.824*

Bold indicates the correlation coefficient among 30 items reached the highest values or stronger than others in each domain.

*Correlation is significant at the 0.01 level (2-tailed).

†Correlation is significant at the 0.05 level (2-tailed).

TABLE 5. An Overview of the Correlation Between Domains and Total Scores and Between Domains in the Construct Validity Analysis

	Total Score	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Total score	1						
Teamwork climate	0.720*	1					
Safety climate	0.772*	0.623*	1				
Job satisfaction	0.711*	0.551*	0.580*	1			
Stress recognition	0.174*	-0.124	-0.172*	-0.162†	1		
Management perception	0.648*	0.404*	0.430*	0.459*	-0.077	1	
Working condition	0.657*	0.477*	0.611*	0.481*	-0.225*	0.510*	1

Bold indicates the highest correlation coefficient.

*Correlation is significant at the 0.01 level (2-tailed).

†Correlation is significant at the 0.05 level (2-tailed).

better results than previous ones. For ICC, all items were in almost perfect agreement, including the majority of those in CITC, except for the stress domain. This was consistent with previous results.^{16,19,21} The reported values demonstrate that this Indonesian version of the SAQ was reliable.

The results of the construct validity analysis with Spearman correlation in terms of questionnaire items, dimension, and total score indicated that all dimensions of patient safety culture had strong to very strong correlation with items. Correlations between 6 dimensions and total score were strong. The majority of item correlations seen from the total score varied from moderate, strong, and very strong. In short, this Indonesian version of the SAQ was good and valid. In particular, the stress dimension showed consistently less valid, and this result was similar to that of previous literature.^{16,18,19,21,23,24,32} Further research is needed to explore and analyze the stress dimension.

This research was conducted only on general dentists in the DKI Jakarta province, the capital city of Indonesia, which consists of 5 municipalities. Jakarta as the capital city of Indonesia has relatively heterogeneous conditions.^{31,36} More research is required with a larger population consisting of both dentists and other health professionals, as well as other regions in Indonesia.

CONCLUSIONS

The Indonesian version of the SAQ has good psychometric properties, especially good internal consistency, validity, and reliability. It has the potential to be a useful tool for evaluating patient safety culture among general dentists in DKI Jakarta.

ACKNOWLEDGMENTS

We thank the University of Indonesia—Puti Doktor No. 05.00/2020 for financial support and thanks to Indonesian Dental Association (IDA) in particular for supporting the linking of dentists throughout Indonesia as members of IDA as respondents to this research.

REFERENCES

1. Kohn LT, Corrigan JM, Donaldson MS. *To Err Is Human Building a Safer Health System*. Washington, DC: National Academies Press; 2000. doi:10.17226/9728.
2. Obadan EM, Ramoni RB, Kalenderian E. Lessons learned from dental patient safety case reports. *J Am Dent Assoc*. 2015;146:318–326.e2.
3. Bailey E, Tickle M, Campbell S. Patient safety in primary care dentistry: where are we now? *Br Dent J*. 2014;217:339–344.
4. Bailey E, Tickle M, Campbell S, et al. Systematic review of patient safety interventions in dentistry. *BMC Oral Health*. 2015;15:152.
5. Pruc M, Golik D, Szarpak L, et al. COVID-19 in healthcare workers. *Am J Emerg Med*. 2020;158984:1. doi:10.1016/j.ajem.2020.05.017.
6. WHO. Overview Data COVID-19 Last updated. Available at: <https://covid19.who.int/>. Published 2020. Accessed October 19, 2020.
7. Kamate SK, Sharma S, Thakar S, et al. Assessing knowledge, attitudes and practices of dental practitioners regarding the COVID-19 pandemic: a multinational study. *Dent Med Probl*. 2020;57:11–17.
8. WHO. Standard precautions in health care. In: *Infection Control*. Geneva, Switzerland: WHO; 2007. doi:10.5005/jp/books/12675_65.
9. Yamalik N, Perea Pérez B. Patient safety and dentistry: what do we need to know? Fundamentals of patient safety, the safety culture and implementation of patient safety measures in dental practice. *Int Dent J*. 2012;62:189–196.
10. WHO. *WHO Draft Guidelines for Adverse Event Reporting and Learning Systems*. Geneve Switzerland: WHO Press; 2005.
11. Pemberton MN. Developing patient safety in dentistry. *Br Dent J*. 2014;217:335–337.
12. Giles S, Panagioti M, Hernan A, et al. Contributory factors to patient safety incidents in primary care: protocol for a systematic review. *Syst Rev*. 2015;4:63.
13. Hill AP, Freeman G. *Promoting Continuity of Care in General Practice*. London, United Kingdom: RCGP UK; 2011.
14. van Melle MA, van Stel HF, Poldervaart JM, et al. Measurement tools and outcome measures used in transitional patient safety; a systematic review. *PLoS One*. 2018;13:e0197312.
15. Bondevik GT, Hofoss D, Husebø BS, et al. The Safety Attitudes Questionnaire—Ambulatory Version: psychometric properties of the Norwegian translated version for the primary care setting. *BMC Health Serv Res*. 2014;14:139.
16. Sexton JB, Helmreich RL, Neilands TB, et al. The Safety Attitudes Questionnaire: psychometric properties, benchmarking data, and emerging research. *BMC Health Serv Res*. 2006;6:44.
17. Nordén-Hägg A, Sexton JB, Kälvemark-Sporrong S, et al. Assessing safety culture in pharmacies: the psychometric validation of the Safety Attitudes Questionnaire (SAQ) in a national sample of community pharmacies in Sweden. *BMC Clin Pharmacol*. 2010;10:8.
18. Zimmermann N, Küng K, Sereika SM, et al. Assessing the Safety Attitudes Questionnaire (SAQ), German language version in Swiss university hospitals—a validation study. *BMC Health Serv Res*. 2013;13:347.
19. Cui Y, Xi X, Zhang J, et al. The Safety Attitudes Questionnaire in Chinese: psychometric properties and benchmarking data of the safety culture in Beijing hospitals. *BMC Health Serv Res*. 2017;17:590.
20. Gabrani A, Hoxha A, Simaku A, et al. Application of the Safety Attitudes Questionnaire (SAQ) in Albanian hospitals: a cross-sectional study. *BMJ Open*. 2015;2015:e006528.
21. Li Y, Zhao X, Zhang X, et al. Validation study of the Safety Attitudes Questionnaire (SAQ) in public hospitals of Heilongjiang province, China. *PLoS One*. 2017;12:e0179486.
22. Cheng HC, Yen AM, Lee YH. Factors affecting patient safety culture among dental healthcare workers: a nationwide cross-sectional survey. *J Dent Sci*. 2019;14:263–268.
23. Al Nadabi W, Faisal M, Mohammed MA. Patient safety culture in Oman: a national study. *J Eval Clin Pract*. 2020;26:1406–1415.
24. Gambashidze N, Hammer A, Ernstmann N. Psychometric properties of the Georgian version of the Safety Attitudes Questionnaire: a cross-sectional study. *BMJ Open*. 2020;10:e034863.
25. Hodgen A, Ellis L, Churruca K, et al. *Safety Culture Assessment in Health Care: A Review of the Literature on Safety Culture Assessment Modes*. Sydney, Australia: The Australian Commission on Safety and Quality in Health Care; 2017. Available at: <https://www.safetyandquality.gov.au/wp-content/uploads/2017/10/Safety-Culture-Assessment-in-Health-Care-A-review-of-the-literature-on-safety-culture-assessment-modes.pdf>. Accessed October 18, 2020.
26. Modak I, Sexton JB, Lux TR, et al. Measuring safety culture in the ambulatory setting: the Safety Attitudes Questionnaire—Ambulatory version. *J Gen Intern Med*. 2007;22:1–5.
27. Bonita R, Beaglehole R, Kjellström T, et al. *Basic Epidemiology*. 2nd ed. Geneve, Switzerland: World Health Organization; 2006.
28. Gjersing L, Caplehorn JR, Clausen T. Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC Med Res Methodol*. 2010;10:13.
29. Wang WL, Lee HL, Fetzer SJ. Challenges and strategies of instrument translation. *West J Nurs Res*. 2006;28:310–321.

30. Beaton DE, Bombardier C, Guillemin F, et al. Guidelines for the process of cross-cultural adaptation of self-report measures dorcus. *Spine (Phila Pa 1976)*. 2000;25:3186–3191.
31. Rachmawati YL, Pratiwi AN, Maharani DA. Cross-cultural adaptation and psychometric properties of the Indonesia version of the Scale of Oral Health Outcomes for 5-year-old children. *J Int Soc Prev Community Dent*. 2017;7:75–81.
32. Kristensen S, Sabroe S, Bartels P, et al. Adaption and validation of the Safety Attitudes Questionnaire for the Danish hospital setting. *Clin Epidemiol*. 2015;7:149–160.
33. Funkhouser E, Vellala K, Baltuck C, et al. HHS Public Access Survey Methods to Optimize Response Rate in the National Dental Practice-Based Research Network Ellen. *Eval Heal Prof*. 2018;176:139–148. Available PMC September 1, 2018.
34. Ammar N, Aly NM, Folayan MO, et al. Behavior change due to COVID-19 among dental academics—the theory of planned behavior: stresses, worries, training, and pandemic severity. *PLoS One*. 2020; 15:e0239961.
35. Lee WC, Wung HY, Liao HH, et al. Hospital safety culture in Taiwan: a nationwide survey using Chinese version Safety Attitude Questionnaire. *BMC Health Serv Res*. 2010;10:234.
36. Adiatman M. Dental and gingival status of 5 and 12-year-old children in Jakarta and its satellite cities. *J Dent Indones*. 2016;23:5–9.

Mita Juliawati

Patient Safety Culture in Dentistry Analysis Using the Safety Attitude Questionnaire in DKI Jakarta, Indonesia: A Cross-Cul...

 Artikel 1

Document Details

Submission ID

trn:oid:::3618:126965004

8 Pages

Submission Date

Jan 27, 2026, 2:44 PM GMT+7

6,293 Words

Download Date

Jan 27, 2026, 2:52 PM GMT+7

31,495 Characters

File Name

patient_safety_culture_in_dentistry_analysis_using.17.pdf

File Size

161.1 KB

16% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- ▶ Bibliography
- ▶ Quoted Text
- ▶ Small Matches (less than 15 words)

Exclusions

- ▶ 13 Excluded Sources

Match Groups

-  **22** Not Cited or Quoted 15%
Matches with neither in-text citation nor quotation marks
-  **2** Missing Quotations 1%
Matches that are still very similar to source material
-  **0** Missing Citation 0%
Matches that have quotation marks, but no in-text citation
-  **0** Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

- 15%  Internet sources
- 12%  Publications
- 13%  Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

-  22 Not Cited or Quoted 15%
Matches with neither in-text citation nor quotation marks
-  2 Missing Quotations 1%
Matches that are still very similar to source material
-  0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation
-  0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

- 15%  Internet sources
- 12%  Publications
- 13%  Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

Rank	Source	Percentage
1	Internet	
	d-nb.info	3%
2	Internet	
	icaictsee.unwe.bg	2%
3	Internet	
	www.frontiersin.org	2%
4	Internet	
	careersdocbox.com	1%
5	Internet	
	documentserver.uhasselt.be	1%
6	Internet	
	eprints.staffs.ac.uk	<1%
7	Student papers	
	Herzing University on 2025-09-14	<1%
8	Internet	
	medworm.com	<1%
9	Internet	
	www.semanticscholar.org	<1%
10	Internet	
	www.tandfonline.com	<1%

11	Internet	
	digitalcommons.uconn.edu	<1%
12	Internet	
	e-journal.unair.ac.id	<1%
13	Internet	
	fn.bmjj.com	<1%
14	Student papers	
	Vicente Sotto Memorial Medical Center on 2022-11-03	<1%
15	Student papers	
	University of Michigan Flint on 2023-10-03	<1%
16	Internet	
	brieflands.com	<1%
17	Student papers	
	Herzing University on 2025-10-06	<1%
18	Internet	
	eprints.whiterose.ac.uk	<1%
19	Internet	
	jurnal.unissula.ac.id	<1%
20	Internet	
	psj.mums.ac.ir	<1%
21	Publication	
	A. Gabrani, A. Hoxha, A. Simaku, J. Gabrani. "Application of the Safety Attitudes Q...	<1%

OPEN

Patient Safety Culture in Dentistry Analysis Using the Safety Attitude Questionnaire in DKI Jakarta, Indonesia: A Cross-Cultural Adaptation and Validation Study

Mita Juliawati, MHA, * Risqa R. Darwita, PhD, † Melissa Adiatman, PhD, † and Fatma Lestari, MSi, PhD‡

Objectives: This study aimed to analyze a cross-cultural adaptation of the Safety Attitude Questionnaire (SAQ) for Indonesian dentists.

Methods: A cross-sectional study was conducted on 250 general dentists in health services in Jakarta, Indonesia. The first step included cultural adaptation and translation, which was followed by the development of the tested questionnaire through expert agreement and by validity and reliability analysis using Spearman correlation coefficient, Cronbach α , and interclass correlation coefficient. The SAQ consisted of 30 items and 6 dimensions (safety climate, teamwork climate, job satisfaction, stress recognition, perception of management, and working conditions).

Respondents were members of the Indonesian Dental Association who voluntarily filled out a Google-based questionnaire from September to October 2020.

Results: A total of 250 respondents with a response rate of 16.4% demonstrated a total Cronbach α value of 0.897, whereas the value per item ranged from 0.890 to 0.905, which suggested an acceptable and good to very good internal consistency. The interclass correlation coefficient value varied from 0.840 to 1.000, which meant almost perfect agreement. The correlation coefficient of 30 questions items resulted in a total SAQ score ranging from 0.422 to 0.699 (moderate to strong correlation) and between 6 dimensions to total SAQ score ranging from 0.648 to 0.772 (strong correlation).

Conclusions: The Indonesian version of the SAQ exhibited good validity and very good reliability and potential to be used for evaluating dentists' patient safety culture in Indonesia.

Key Words: Indonesia, patient safety, safety culture, validation study, dentists

(*J Patient Saf* 2022;18: 486–493)

Safety has become a worldwide issue, especially in health services.¹ Data on unexpected incidents or adverse events in various countries have led to patient safety systems being created.^{2,3} Several reviews have shown that patient safety incidents are caused by human behavior and can cause permanent damage² with costly consequences.^{3,4}

The situation has been exacerbated by the global COVID-19 pandemic, where doctors and medical personnel are regarded as high-risk professions.⁵ As of October 2020, more than 200 countries have been infected, and total confirmed and new cases were 39,596,858

and 389,683, respectively, and deaths cases were 1,107,374; in Indonesia, total cases were 357,762, with 12,431 dead.⁶

In dentistry, dentists and dental therapists are at high risk of cross-infection and can be the first contact persons because they have close interactions with patients who are potential sources of infection.⁷ Thus, all parties should take standard precautions, especially regarding the implementation of the universal precaution from the World Health Organization.⁸ This shows the importance of patient safety cultural factors, especially for medical personnel.⁵

Patient safety is fundamental to provide high-quality dental care.^{2,9} Dentists and dental institutions are committed to providing excellent care, where one of the most important factors is safety. Some literature^{1,2} have described that errors can also occur in dentistry.^{2,10} Factors that can cause injury include fatigue, inexperience, poor supervision, wrong procedures, and a low safety culture.²

To prevent errors, a patient safety culture should be implemented.¹¹ Increasing patient safety culture in primary and secondary healthcare facilities builds public trust.¹¹ Early research on patient safety culture focused primarily on secondary healthcare such as hospitals. It is now necessary to examine patient safety culture in primary health care because 85% of healthcare professionals are in primary care facilities.^{12,13} Therefore, it is crucial to study patient safety culture factors for dentists and correct the absence of investigations of patient safety culture in dental services in Indonesia, especially in primary health services.

Several tools to measure the perception of respondents are available. They combine elements of various dimensions of patient safety culture, such as the Safety Attitude Questionnaire (SAQ).^{14–16} It was first developed by Sexton et al more than 2 decades ago at Texas University, United States, and it has been modified by researchers from the United States, Europe, and Asia, including states and countries such as Texas, Sweden, Norway, Germany, Denmark, Albania, China, Taiwan, Oman, and Georgia.^{15–24}

The questionnaire was adapted from the short version of the original SAQ, which consists of 30 items and 6 dimensions of safety culture (safety climate, teamwork climate, job satisfaction, stress recognition, perception of management, and working conditions).^{15,16,21,25} The SAQ is the most commonly used and rigorously validated tool for measuring the safety climate in health care²¹ and is also the most suitable for evaluating safety culture in primary and secondary health services, with the potential for large-scale implementation and appropriate for quantitative research.^{15,25} The original English version of the SAQ was obtained from a previous publication.¹⁶ Among the various SAQ versions, the SAQ Chinese version was chosen because it fits the original SAQ template—generic short form, and Asian cultures are expected to obtain the same good results.²¹ The Indonesian version of SAQ is applied to outpatient services in primary health care in accordance with previous studies for the SAQ-Ambulatory version.^{15,22,26}

Until now, there is no instrument to measure patient safety culture in dentistry. Therefore, this study aims to analyze a cross-cultural adaptation of the SAQ for Indonesian dentists.

From the *Graduate School, Doctoral Study Programme, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia; †Department of Dental Public Health and Preventive Dentistry, Faculty of Dentistry, Universitas, Indonesia, Jakarta, Indonesia; ‡Occupational Health and Safety Department, Faculty of Public Health, Universitas Indonesia, Depok Indonesia.

Correspondence: Mita Juliawati, MHA, Department of Dental Public Health and Preventive Dentistry, Faculty of Dentistry, Universitas Indonesia, Jl. Salemba Raya 4, Jakarta, Indonesia (e-mail: mitajuliawati@yahoo.com); (e-mail: mitajuliawati@gmail.com).

Copyright © 2022 The Author(s). Published by Wolters Kluwer Health, Inc. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

METHODS

Study Design

The research design was analytic observational with a cross-sectional approach, and it used the quantitative method.²⁷ The adaptation process followed modified cross-cultural adaptation principles from previous literature.^{15,28} The initial stage was the investigation of the conceptual and equivalence accuracy of SAQ's items and adjustments to the literature review. Then, the original English version of SAQ was translated by bilingual dentists and professionals into Indonesian. Translations were assessed and revised by a panel of experts with bilingual skills regarding either the concept of domains or suitability items against the original version. The panel consisted of a dentist and a public health researcher who were familiar with the patient safety questionnaire. The next stage included creating a synthesized back-translated version by sworn professional translators with backgrounds in dentistry and by international graduate dentists with bilingual skills.^{28,29} Subsequently, a review of the synthesized translated version and the back-synthesized version was reviewed by a committee of experts,^{28,30} which consisted of experts in the field of dentistry and public health who were bilingual and who understood patient safety culture to ensure that the items were translated correctly and were relevant.^{28,29} Later, the synthesized translated version was tested to determine if the questionnaire items could be understood.^{28,31} Because of COVID-19, all the aforementioned stages were performed online via Google Form, Zoom, and WhatsApp media. Furthermore, the new instrument was evaluated in terms of semantic adjustments through a final consensus, followed by testing for validity and reliability using recognized statistical methods.^{21,28}

The study was approved by the Ethics Committee of Dentistry Faculty Universitas Indonesia (No. 13/Ethical-Approval/FKG UI/VII/2020) and received permission and recommendation from the Executive Board of the Indonesian Dental Association (IDA; No. 2697/PB PDGI/Recommendations/II-5/2020).

Data Collection

Considering the situation in Indonesia during the COVID-19 Pandemic, the research was conducted online using Google Form, and the link was shared through the online-based network from IDA via WhatsApp, Facebook, the IDA Web site, and its Instagram account. The study was conducted in the DKI Jakarta area for 4 weeks in September and October 2020, and 250 general dentists were sampled. All respondents who received the link filled out the

informed consent form before going on to complete the questionnaire (Fig. 1).

The core version of the SAQ in short form, which consisted of 6 domains and 30 questionnaire items, was adapted from the English version and adjusted to the Chinese version, then translated into the Indonesian version. The version of the back translation was as illustrated in Tables 2 and 4.^{16,21,25} The SAQ uses a Likert scale from 1 to 5 (strongly disagree, disagree slightly, neutral, agree slightly, and agree strongly). The sum of the Likert scale from questionnaire items is the total score. The higher the score, the higher the safety culture. All are positive sentences except for items 2 and 11.^{16,21,32}

Additional questions were used to assess demographic information and determine respondent characteristics (i.e., sex, age, health facility type, practice area, number of patients worked on per day, duration of practice, IDA membership, last education, have attended a workshop about patient safety and ownership of a valid registration certificate, and a valid practical license).

The population included members of the IDA in DKI Jakarta. The sample constituted of those who voluntarily filled the Google-based questionnaire from September to October 2020. The sample size estimate shows that minimum sample size was 212 and total sample size was 250 respondents. They have met the inclusion criteria for the required sample size.³¹ A *P* values <0.05 indicated statistical significance with a power of 80%, assuming an effect size of 0.03. For interclass correlation coefficient (ICC) calculation, we used a subsample of 40 respondents. The inclusion criteria were general dentists practicing in primary and secondary health facilities in the DKI Jakarta area. The exclusion criterion was double entry.

Data Analysis

Data from Google Form were retrieved and transferred into SPSS data file format. Data analysis was conducted using IBM SPSS Statistic version 23 (IBM, Armonk, New York). The negative score items were reversed before analysis as follows: "In this clinical area, it is difficult to speak if I see problems with patient care," and "In this clinical area, it is difficult to discuss errors."^{16,21} Validity and reliability tests using Cronbach α , corrected item total correlation (CITC), ICC, and Spearman coefficient correlation were conducted.^{16,21}

RESULTS

In all, 281 dentists in DKI Jakarta answered the Google Form questionnaire after sharing it online to 1719 respondents, but only 250 were valid. Thirty-one responses were invalid because of double entry. The response rate was 16.4%. Forty of 250 dentist were

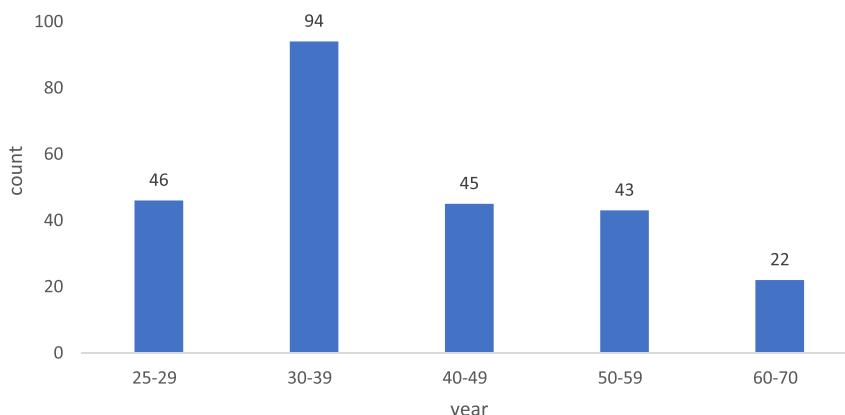


FIGURE 1. Age diagram of respondents in Jakarta Province (n = 250).

TABLE 1. Demographic Characteristics of Respondents in Jakarta Province (n = 250)

Variable	Category	Frequency	%
Age, y	25–29	46	18.4
	30–39	94	37.6
	40–49	45	18.0
	50–59	43	17.2
	60–70	22	8.8
Sex	Man	44	17.6
	Woman	206	82.4
Type of health facilities	Primary health facilities	193	77.2
	Secondary health facilities	57	22.8
Practice area	Urban	236	94.4
	Rural	14	5.6
No. patients worked on per day	None	9	3.6
	1–10	207	82.8
	11–20	27	10.8
	21–30	5	2.0
	>30	2	0.8
Duration of practice, y	1–5	81	32.4
	6–10	44	17.6
	11–15	41	16.4
	16–20	26	10.4
	>20	58	23.2
Membership of IDA District	IDA West Jakarta	71	28.4
	IDA Central Jakarta	70	28.0
	IDA South Jakarta	52	20.8
	IDA East Jakarta	44	17.6
	IDA North Jakarta	13	5.2
Last education	Undergraduate	188	75.2
	Graduate/Master	52	20.8
	Doctorate	7	2.8
	Others	3	1.2
Have attended a seminar/ training about patient safety	Ever	184	73.6
	Never	66	26.4
Ownership of a valid registration certificate	Yes	247	98.8
	No	3	1.2
Ownership of a valid practical license	Yes	235	94.0
	No	15	6.0

selected for ICC analysis. Demographic data in Table 1 show that 82.4% of the respondents were female dentists. Furthermore, most were 30 to 39 years of age, 77.2% practiced in primary health facilities, and 22.8% practiced in hospitals. Approximately 94.4% of these dentists practiced in urban areas, and only 5.6% practiced in rural areas. The number of patients treated per day was 82.4%, with a maximum of 10 patients. Only 1.2% worked on more than 30 patients per day. Thirty-two percent of respondents had practiced for a maximum of 5 years, 23% for more than 20 years, and at least 10% for 16 to 20 years. The least number of respondents (5%) was from North Jakarta, and other Jakarta areas almost had the same percentage. The majority of respondents (75.2%) achieved undergraduate education, 20.8% were master graduates,

and only 0.3% were doctoral graduates. Nearly 73.6% of respondents in DKI had attended seminars on patient safety. The majority of respondents had a valid registration certificate (98.8%) and practice license (94%).

The reliability assessment demonstrated a total Cronbach α for the 30 items of 0.897, and the total Cronbach α for 6 domains was 0.727 (Table 3). The aforementioned results illustrate that the internal consistency category was acceptable ($0.7 \leq \alpha \leq 0.8$), good ($0.8 \leq \alpha \leq 0.9$), and excellent/very good ($\alpha \geq 0.9$). These conditions suggest that the questionnaire is reliable. The CTC value of 30 items varied, with the majority of items being greater than 0.3, except for certain items, and was below the minimum limit for stress domain (Tables 2, 3). This was in accordance with previous results.^{16,19,21,32}

Tables 2 and 3 show that the respondents' ICC values varied from 0.9 to 1.0 or perfect agreement (0.81–1.00). In this study, more than 90% of the results were almost perfectly correlated. Therefore, the questionnaire was reliable and stable.

In this study, the construct validity test was performed with Spearman correlation. First, the normality test was applied by using the one-sample Kolmogorov-Smirnov test. Item distribution was not normal. Table 4 indicates that each item has a strong correlation with the total score. The construct validity test results revealed that most item variables had moderate to strong correlation ($r = 0.422$ – 0.699). Each item also had a strong correlation with its dimension, such as the job satisfaction dimension, with five items in the job satisfaction column exhibiting very strong correlation (0.798–0.895). The stress recognition dimension with its 4-item column showed a strong to very strong correlation (0.783–0.836). Results revealed that all dimensions had a strong to very strong relationship with the item, suggesting that validity was good. Table 5 presents the strong correlation between the dimension and the total score and between all dimensions except for stress. This finding was consistent with previous studies.^{16,19,21,32} Overall analysis results suggest that questionnaire items, dimension, and total score were good and valid for the Indonesian version of the SAQ.

DISCUSSION

This study was a cross-cultural adaptation of the original SAQ, which has been modified from the Chinese version and which has been validated for use by Indonesian dentists in Jakarta. Demographic data showed that the majority of respondents were female dentists and that those who practiced in primary health facilities dominated (77.2%), with the remainder practicing in secondary health facilities. This was consistent with previous research on healthcare workers that have indicated that many dentists were in primary health facilities and the importance of patient safety in dentistry in such facilities^{4,11,12}. The majority of respondents practiced in urban areas, and only 5.6% worked in rural areas. On average, general dentist respondents had an undergraduate background and had practice experience ranging from at least 5 to more than 20 years. The experience of attending seminars or training on patient safety also predominated among respondents. This result suggested that they could understand the contents of the patient safety culture questionnaire. In accordance with the inclusion criteria, professional dentist must have a valid registration certificate and practical license, and most satisfied these requirements (98.8%).

Discussing data collection in online research during a COVID-19 pandemic includes both advantages and disadvantages. The research was more efficient and low cost, but not all target respondents were reached because of their social media use trends. For example, dentists who rarely read messages via groups, senior dentists who do not understand social media, and dentists who

TABLE 2. Results of Cronbach α , CITC, and ICC Analysis of Respondent Data in DKI Jakarta Province

Domain	Item	α Cronbach if Item Deleted (n = 250)	α Cronbach Total (n = 250)	CITC (n = 250)	ICC (n = 40)
1 Teamwork climate	1. Nurse input is well received in this clinical area.	0.893	0.897	0.521	0.990
3	2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	0.897		0.297	0.953
2	3. Disagreements in this clinical area are appropriately resolved.	0.891		0.674	0.900
4	4. I have the support I need from other personnel to care for patients.	0.890		0.677	1.000
5	5. It is easy for personnel in this clinical area to ask questions when there is something that they do not understand.	0.891		0.609	1.000
	6. The physicians and nurses here work together as a well-coordinated team.	0.890		0.638	0.968
	7. I would feel safe being treated here as a patient.	0.890		0.691	0.980
	8. Medical errors are handled appropriately in this clinical area.	0.893		0.533	0.957
	9. I know the proper channels to direct questions regarding patient safety in this clinical area.	0.891		0.603	0.985
	10. I receive appropriate feedback about my performance.	0.890		0.630	0.955
	11. I receive appropriate feedback about my performance.	0.895		0.369	1.000
	12. I am encouraged by my colleagues to report any patient safety concerns I may have.	0.891		0.585	0.978
	13. The culture in this clinical area makes it easy to learn from the errors of other.	0.890		0.628	0.981
	14. I like my job.	0.893		0.496	0.980
	15. Working in this hospital is like being part of a large family.	0.891		0.606	1.000
	16. This is a good place to work.	0.889		0.709	0.989
	17. I am proud to work in this clinical area.	0.890		0.674	0.992
	18. Morale in this clinical area is high.	0.891		0.644	0.990
	19. When my workload becomes excessive, my performance is impaired.	0.903		0.046	0.849
	20. I am less effective at work when fatigued.	0.904		0.025	0.840
	21. I am more likely to make errors in tense or hostile situations.	0.905		-0.021	0.846
	22. Fatigue impairs my performance during emergency situations.	0.905		-0.025	0.849
4	23. Management supports my daily efforts.	0.891		0.640	0.990
5	24. Management does not knowingly compromise the safety of patients.	0.902		0.187	0.979
	25. I get adequate, timely information about events in the hospital that might affect my work from the unit management.	0.892		0.536	0.986
	26. The levels of staffing in this clinical area are sufficient to handle the number of patients.	0.892		0.533	0.992
	27. This hospital does a good job of training new personnel.	0.891		0.563	0.992
	28. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	0.891		0.606	0.982
	29. Trainees in my discipline are adequately supervised.	0.891		0.569	1.000
	30. Problem personnel in this clinical area are dealt with constructively by our management.	0.891		0.568	0.987

n = 40 from DKI Jakarta subsample.

TABLE 3. Results of Cronbach α Analysis of Total and 6 Domains, and CITC and ICC Data of Respondents in DKI Jakarta Province

Domain Item	α Cronbach if Item Deleted (n = 250)	α Cronbach Total (n = 250)	CITC (n = 250)	ICC (n = 40)
Teamwork climate	0.620	0.727	0.679	0.991
Safety climate	0.597		0.715	0.990
Job satisfaction	0.644		0.620	0.993
Stress recognition	0.863		-0.169	0.845
Management perception	0.658		0.621	0.993
Working condition	0.659		0.586	0.998

n = 40 from DKI Jakarta subsample.

do not use social media. Furthermore, online research may have led to more unbiased results because researchers cannot engage directly with respondents compared with face-to-face questionnaires. Therefore, the response rate for online data collection would be lower than face-to-face methods.^{33,34}

Furthermore, this research was used to identify potential problems contained in the questionnaire, such as misunderstandings about the

meaning of the desired item and clarity. The importance of a research was carried out based on previous research methods.^{15,21,28}

The results proved that the psychometric properties of the Indonesian version of SAQ were valid and reliable. The reliability test with Cronbach α illustrated that the internal consistency category ranged from good to excellent, where, in previous studies, the value range was 0.56 to 0.89.^{18,20-22,32,35} This study demonstrated

TABLE 4. Overview of the Correlation Between Items With Domains and Items With Total Score as the Result of Construct Validity Analysis

Domain	Item	Spearman Correlation (n = 250)						
		Total Score	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Teamwork climate	1. Nurse input is well received in this clinical area.	0.422*	0.607*	0.385*	0.333*	-0.051	0.210*	0.280*
	2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	0.439*	0.680*	0.460*	0.352*	-0.250*	0.269*	0.380*
	3. Disagreements in this clinical area are appropriately resolved.	0.599*	0.730*	0.579*	0.454*	-0.110	0.362*	0.441*
	4. I have the support I need from other personnel to care for patients.	0.678*	0.759*	0.560*	0.494*	-0.021	0.369*	0.398*
	5. It is easy for personnel in this clinical area to ask questions when there is something that they do not understand.	0.606*	0.727*	0.500*	0.451*	0.021	0.294*	0.372*
	6. The physicians and nurses here work together as a well-coordinated team	0.612*	0.717*	0.481*	0.453*	0.026	0.360*	0.363*
	7. I would feel safe being treated here as a patient.	0.660*	0.576*	0.669*	0.516*	-0.095	0.436*	0.474*
	8. Medical errors are handled appropriately in this clinical area.	0.611*	0.530*	0.683*	0.415*	-0.028	0.394*	0.411*
	9. I know the proper channels to direct questions regarding patient safety in this clinical area.	0.601*	0.492*	0.752*	0.451*	-0.125 [†]	0.349*	0.508*
	10. I receive appropriate feedback about my performance.	0.606*	0.509*	0.730*	0.471*	-0.169*	0.444*	0.527*
	11. I receive appropriate feedback about my performance.	0.501*	0.488*	0.660*	0.431*	-0.259*	0.312*	0.486*
	12. I am encouraged by my colleagues to report any patient safety concerns I may have.	0.536*	0.429*	0.677*	0.405*	-0.091	0.303*	0.365*
	13. The culture in this clinical area makes it easy to learn from the errors of other.	0.602*	0.466*	0.705*	0.446*	-0.106	0.341*	0.513*
	14. I like my job	0.489*	0.388*	0.359*	0.798*	-0.149 [†]	0.375*	0.315*

(Continued next page)

TABLE 4. (Continued)

Domain	Item	Spearman Correlation (n = 250)						
		Total Score	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Job satisfaction	15. Working in this hospital is like being part of a large family.	0.615*	0.451*	0.448*	0.863*	-0.104	0.385*	0.385*
	16. This is a good place to work.	0.699*	0.523*	0.601*	0.866*	-0.121	0.451*	0.528*
	17. I am proud to work in this clinical area.	0.679*	0.517*	0.547*	0.895*	-0.106	0.455*	0.440*
	18. Morale in this clinical area is high.	0.636*	0.531*	0.546*	0.835*	-0.128*	0.352*	0.405*
Stress recognition	19. When my workload becomes excessive, my performance is impaired.	0.172*	-0.067	-0.119	-0.102	0.783*	-0.030	-0.134*
	20. I am less effective at work when fatigued.	0.200*	-0.037	-0.085	-0.085	0.836*	-0.075	-0.188*
	21. I am more likely to make errors in tense or hostile situations.	0.121	-0.110	-0.165*	-0.138†	0.801*	-0.048	-0.185*
	22. Fatigue impairs my performance during emergency situations.	0.131*	-0.144*	-0.142*	-0.140†	0.813*	-0.094	-0.181*
Perception of management	23. Management supports my daily efforts.	0.604*	0.458*	0.483*	0.576*	-0.146*	0.645*	0.520*
	24. Management does not knowingly compromise the safety of patients.	0.304*	0.154*	0.151*	0.202*	-0.054	0.697*	0.190*
	25. I get adequate, timely information about events in the hospital that might affect my work from the unit management.	0.571*	0.393*	0.488*	0.446*	-0.109	0.662*	0.532*
	26. The levels of staffing in this clinical area are sufficient to handle the number of patients.	0.556*	0.433*	0.450*	0.360*	-0.025	0.624*	0.478*
Working condition	27. This hospital does a good job of training new personnel.	0.554*	0.355*	0.517*	0.380*	-0.175*	0.453*	0.847*
	28. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	0.573*	0.394*	0.512*	0.395*	-0.120	0.486*	0.728*
	29. Trainees in my discipline are adequately supervised.	0.535*	0.386*	0.506*	0.377*	-0.195*	0.391*	0.802*
	30. Problem personnel in this clinical area are dealt with constructively by our management.	0.573*	0.444*	0.456*	0.430*	-0.162†	0.487*	0.824*

Bold indicates the correlation coefficient among 30 items reached the highest values or stronger than others in each domain.

*Correlation is significant at the 0.01 level (2-tailed).

†Correlation is significant at the 0.05 level (2-tailed).

TABLE 5. An Overview of the Correlation Between Domains and Total Scores and Between Domains in the Construct Validity Analysis

	Total Score	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Management Perception	Working Condition
Total score	1						
Teamwork climate	0.720*	1					
Safety climate	0.772*	0.623*	1				
Job satisfaction	0.711*	0.551*	0.580*	1			
Stress recognition	0.174*	-0.124	-0.172*	-0.162†	1		
Management perception	0.648*	0.404*	0.430*	0.459*	-0.077	1	
Working condition	0.657*	0.477*	0.611*	0.481*	-0.225*	0.510*	1

Bold indicates the highest correlation coefficient.

*Correlation is significant at the 0.01 level (2-tailed).

†Correlation is significant at the 0.05 level (2-tailed).

better results than previous ones. For ICC, all items were in almost perfect agreement, including the majority of those in CITC, except for the stress domain. This was consistent with previous results.^{16,19,21} The reported values demonstrate that this Indonesian version of the SAQ was reliable.

The results of the construct validity analysis with Spearman correlation in terms of questionnaire items, dimension, and total score indicated that all dimensions of patient safety culture had strong to very strong correlation with items. Correlations between 6 dimensions and total score were strong. The majority of item correlations seen from the total score varied from moderate, strong, and very strong. In short, this Indonesian version of the SAQ was good and valid. In particular, the stress dimension showed consistently less valid, and this result was similar to that of previous literature.^{16,18,19,21,23,24,32} Further research is needed to explore and analyze the stress dimension.

This research was conducted only on general dentists in the DKI Jakarta province, the capital city of Indonesia, which consists of 5 municipalities. Jakarta as the capital city of Indonesia has relatively heterogeneous conditions.^{31,36} More research is required with a larger population consisting of both dentists and other health professionals, as well as other regions in Indonesia.

CONCLUSIONS

The Indonesian version of the SAQ has good psychometric properties, especially good internal consistency, validity, and reliability. It has the potential to be a useful tool for evaluating patient safety culture among general dentists in DKI Jakarta.

ACKNOWLEDGMENTS

We thank the University of Indonesia—Puti Doktor No. 05.00/2020 for financial support and thanks to Indonesian Dental Association (IDA) in particular for supporting the linking of dentists throughout Indonesia as members of IDA as respondents to this research.

REFERENCES

1. Kohn LT, Corrigan JM, Donaldson MS. *To Err Is Human Building a Safer Health System*. Washington, DC: National Academies Press; 2000. doi:10.17226/9728.
2. Obadan EM, Ramoni RB, Kalenderian E. Lessons learned from dental patient safety case reports. *J Am Dent Assoc*. 2015;146:318–326.e2.
3. Bailey E, Tickle M, Campbell S. Patient safety in primary care dentistry: where are we now? *Br Dent J*. 2014;217:339–344.
4. Bailey E, Tickle M, Campbell S, et al. Systematic review of patient safety interventions in dentistry. *BMC Oral Health*. 2015;15:152.
5. Pruc M, Golik D, Szarpak L, et al. COVID-19 in healthcare workers. *Am J Emerg Med*. 2020;158984:1. doi:10.1016/j.ajem.2020.05.017.
6. WHO. Overview Data COVID-19 Last updated. Available at: <https://covid19.who.int/>. Published 2020. Accessed October 19, 2020.
7. Kamate SK, Sharma S, Thakar S, et al. Assessing knowledge, attitudes and practices of dental practitioners regarding the COVID-19 pandemic: a multinational study. *Dent Med Probl*. 2020;57:11–17.
8. WHO. Standard precautions in health care. In: *Infection Control*. Geneva, Switzerland: WHO; 2007. doi:10.5005/jp/books/12675_65.
9. Yamalik N, Perea Pérez B. Patient safety and dentistry: what do we need to know? Fundamentals of patient safety, the safety culture and implementation of patient safety measures in dental practice. *Int Dent J*. 2012;62:189–196.
10. WHO. *WHO Draft Guidelines for Adverse Event Reporting and Learning Systems*. Geneve Switzerland: WHO Press; 2005.
11. Pemberton MN. Developing patient safety in dentistry. *Br Dent J*. 2014;217:335–337.
12. Giles S, Panagioti M, Hernan A, et al. Contributory factors to patient safety incidents in primary care: protocol for a systematic review. *Syst Rev*. 2015;4:63.
13. Hill AP, Freeman G. *Promoting Continuity of Care in General Practice*. London, United Kingdom: RCGP UK; 2011.
14. van Melle MA, van Stel HF, Poldervaart JM, et al. Measurement tools and outcome measures used in transitional patient safety; a systematic review. *PLoS One*. 2018;13:e0197312.
15. Bondevik GT, Hofoss D, Husebø BS, et al. The Safety Attitudes Questionnaire—Ambulatory Version: psychometric properties of the Norwegian translated version for the primary care setting. *BMC Health Serv Res*. 2014;14:139.
16. Sexton JB, Helmreich RL, Neilands TB, et al. The Safety Attitudes Questionnaire: psychometric properties, benchmarking data, and emerging research. *BMC Health Serv Res*. 2006;6:44.
17. Nordén-Hägg A, Sexton JB, Kälvemark-Sporrong S, et al. Assessing safety culture in pharmacies: the psychometric validation of the Safety Attitudes Questionnaire (SAQ) in a national sample of community pharmacies in Sweden. *BMC Clin Pharmacol*. 2010;10:8.
18. Zimmermann N, Küng K, Sereika SM, et al. Assessing the Safety Attitudes Questionnaire (SAQ), German language version in Swiss university hospitals—a validation study. *BMC Health Serv Res*. 2013;13:347.
19. Cui Y, Xi X, Zhang J, et al. The Safety Attitudes Questionnaire in Chinese: psychometric properties and benchmarking data of the safety culture in Beijing hospitals. *BMC Health Serv Res*. 2017;17:590.
20. Gabrani A, Hoxha A, Simaku A, et al. Application of the Safety Attitudes Questionnaire (SAQ) in Albanian hospitals: a cross-sectional study. *BMJ Open*. 2015;2015:e006528.
21. Li Y, Zhao X, Zhang X, et al. Validation study of the Safety Attitudes Questionnaire (SAQ) in public hospitals of Heilongjiang province, China. *PLoS One*. 2017;12:e0179486.
22. Cheng HC, Yen AM, Lee YH. Factors affecting patient safety culture among dental healthcare workers: a nationwide cross-sectional survey. *J Dent Sci*. 2019;14:263–268.
23. Al Nadabi W, Faisal M, Mohammed MA. Patient safety culture in Oman: a national study. *J Eval Clin Pract*. 2020;26:1406–1415.
24. Gambashidze N, Hammer A, Ernstmann N. Psychometric properties of the Georgian version of the Safety Attitudes Questionnaire: a cross-sectional study. *BMJ Open*. 2020;10:e034863.
25. Hodgen A, Ellis L, Churruca K, et al. *Safety Culture Assessment in Health Care: A Review of the Literature on Safety Culture Assessment Modes*. Sydney, Australia: The Australian Commission on Safety and Quality in Health Care; 2017. Available at: <https://www.safetyandquality.gov.au/wp-content/uploads/2017/10/Safety-Culture-Assessment-in-Health-Care-A-review-of-the-literature-on-safety-culture-assessment-modes.pdf>. Accessed October 18, 2020.
26. Modak I, Sexton JB, Lux TR, et al. Measuring safety culture in the ambulatory setting: the Safety Attitudes Questionnaire—Ambulatory version. *J Gen Intern Med*. 2007;22:1–5.
27. Bonita R, Beaglehole R, Kjellström T, et al. *Basic Epidemiology*. 2nd ed. Geneve, Switzerland: World Health Organization; 2006.
28. Gjersing L, Caplehorn JR, Clausen T. Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC Med Res Methodol*. 2010;10:13.
29. Wang WL, Lee HL, Fetzer SJ. Challenges and strategies of instrument translation. *West J Nurs Res*. 2006;28:310–321.

30. Beaton DE, Bombardier C, Guillemin F, et al. Guidelines for the process of cross-cultural adaptation of self-report measures dorcus. *Spine (Phila Pa 1976)*. 2000;25:3186–3191.
31. Rachmawati YL, Pratiwi AN, Maharani DA. Cross-cultural adaptation and psychometric properties of the Indonesia version of the Scale of Oral Health Outcomes for 5-year-old children. *J Int Soc Prev Community Dent*. 2017;7:75–81.
32. Kristensen S, Sabroe S, Bartels P, et al. Adaption and validation of the Safety Attitudes Questionnaire for the Danish hospital setting. *Clin Epidemiol*. 2015;7:149–160.
33. Funkhouser E, Vellala K, Baltuck C, et al. HHS Public Access Survey Methods to Optimize Response Rate in the National Dental Practice-Based Research Network Ellen. *Eval Heal Prof*. 2018;176:139–148. Available PMC September 1, 2018.
34. Ammar N, Aly NM, Folayan MO, et al. Behavior change due to COVID-19 among dental academics—the theory of planned behavior: stresses, worries, training, and pandemic severity. *PLoS One*. 2020; 15:e0239961.
35. Lee WC, Wung HY, Liao HH, et al. Hospital safety culture in Taiwan: a nationwide survey using Chinese version Safety Attitude Questionnaire. *BMC Health Serv Res*. 2010;10:234.
36. Adiatman M. Dental and gingival status of 5 and 12-year-old children in Jakarta and its satellite cities. *J Dent Indones*. 2016;23:5–9.