

eISSN 2279-9036

Journal of Public Health Research

Editor-in-Chief
Luigi Barberini, Italy

journals.sagepub.com/home/phj



2020 Vol.9 No.2

Published: 2020-07-03

ORIGINAL ARTICLES



PSYCHOMETRIC PROPERTIES OF SLEEP HYGIENE INDEX IN INDONESIAN ADOLESCENTS

Anggi Setyowati, Min-Huey Chung, Ah Yusuf, Setya Haksama

<https://doi.org/10.4081/jphr.2020.1806>

PDF

HTML



FACTORS INFLUENCING PATIENT ATTENTION TOWARD AUDIOVISUAL-HEALTH EDUCATION MEDIA IN THE WAITING ROOM OF A PUBLIC HEALTH CENTER

Anas Tamsuri, Sri Widati

<https://doi.org/10.4081/jphr.2020.1807>

PDF

HTML



FACTORS AFFECTING EMERGENCY NURSES' PERCEPTIONS OF THE TRIAGE SYSTEMS

Ani Sutriningsih, Chatarina Umbul Wahyuni, Setya Haksama

<https://doi.org/10.4081/jphr.2020.1808>

PDF

HTML



OWNERSHIP OF MOTHER AND CHILDREN'S HEALTH BOOK AND COMPLETE BASIC IMMUNIZATION STATUS IN SLUMS AND POOR POPULATION

Arief Hargono, Hario Megatsari, Kurnia Dwi Artanti, Triska Susila Nindya, Ratna Dwi Wulandari

<https://doi.org/10.4081/jphr.2020.1809>

PDF

HTML



ACUTE CORONARY SYNDROME AND PATIENT BEHAVIOR FACTORS IN OVERCOMING THE EVENT OF CHEST PAIN IN PRE HOSPITAL PHASE

Cipto Susilo, Mochammad Bagus Qomaruddin, Mellani Puji Fahrera

<https://doi.org/10.4081/jphr.2020.1810>

PDF

HTML



THE EFFECT OF RHODAMINE B ON THE CEREBELLUM AND BRAINSTEM TISSUE OF *RATTUS NORVEGICUS*

Dewi Ratna Sulistina, Santi Martini

<https://doi.org/10.4081/jphr.2020.1812>

PDF

HTML



THE MATERNAL REFERRAL MOBILE APPLICATION SYSTEM FOR MINIMIZING THE RISK OF CHILDBIRTH

Diah Indriani, Nyoman Anita Damayanti, Danu Teguh, Muhammad Ardian, Hud Suhargono, Satriawansyah Urbaya, Ratna Dwi Wulandari, Triska Susila Nindya, Ernawaty, Nuzulul Kusuma Putri, Ilham Akhsanu Ridlo

<https://doi.org/10.4081/jphr.2020.1813>



NARRATIVE STORIES OF HIGH RISK SEXUAL BEHAVIORS AMONG ADOLESCENTS IN MAKASSAR CITY

Indra Fajarwati Ibnu, Chatarina Umbul Wahyuni, Shrimarti Rukmini Devy

<https://doi.org/10.4081/jphr.2020.1830>



DEVELOPMENT OF SWEET POTATO (*IPOMOEA BATATAS* LAMK.) AS EXCIPIENT IN TABLET FORMULATION

Lamia Diang Mahalia, Stefanus Supriyanto, Yandi Syukri

<https://doi.org/10.4081/jphr.2020.1831>



HEALTH PROMOTING HOSPITAL: A PRACTICAL STRATEGY TO IMPROVE PATIENT LOYALTY IN PUBLIC SECTOR

Minarni Wartingsih, Stefanus Supriyanto, Sri Widati, **Ernawaty**, Retno Lestari

<https://doi.org/10.4081/jphr.2020.1832>



DEPRESSION AND FUNCTIONAL DISABILITY IN STROKE PATIENTS

Puji Astuti, Kusnanto, Ferra Dwi Novitasari

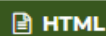
<https://doi.org/10.4081/jphr.2020.1835>



THE SUPERIOR SERVICE BASED ON THE HIGHEST NUMBER OF VISITS AND INCOME OF HAJJ HOSPITAL SURABAYA IN THE NATIONAL HEALTH INSURANCE ERA

Rachmad Cahyadi, Stefanus Supriyanto, Ratna Dwi Wulandari

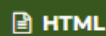
<https://doi.org/10.4081/jphr.2020.1836>



RECOVERY TIME PERIOD AND QUALITY OF LIFE AFTER HYSTERECTOMY

Raden Khairiyatul Afiah, Chatarina Umbul Wahyuni, Budi Prasetyo, Didik Dwi Winarno

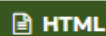
<https://doi.org/10.4081/jphr.2020.1837>



THE IMPACT OF SOCIAL CAPITAL, DEMOGRAPHIC FACTORS, AND COPING STRATEGIES ON COMMUNITY ADAPTATION IN SUPPORTING PEOPLE WITH SEVERE MENTAL ILLNESS

Retno Lestari, Ah Yusuf, Rachmat Hargono, Ahsan, Febri Endra Budi Setyawan, Nyoman Anita Damayanti

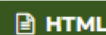
<https://doi.org/10.4081/jphr.2020.1838>



REINFORCEMENT OF HUMAN RESOURCES IN IMPLEMENTING HEALTHY INDONESIAN PROGRAM WITH FAMILY APPROACH

Retno Widiarini, Djazuly Chalidyanto, Eva Rusdianah

<https://doi.org/10.4081/jphr.2020.1839>



EFFECT OF AGE AND WEIGHT ON PHYSICAL ACTIVITY

Rivan Virlando Suryadinata, Bambang Wirjatmadi, Merryana Adriani, Amelia Lorensia

<https://doi.org/10.4081/jphr.2020.1840>

Editorial Board

Editor in Chief

Luigi Barberini

University of Cagliari and University Hospital of Cagliari, Italy

Degree in Physics in 1998, PhD in Chemistry in 2007 and Medical Physics Specialization in 2013. Medical Physicist at the University Hospital of Cagliari AOUC, Italy, and Coordinator of the Medical Physics Service in AOUC.

Coordinator of the Italian Research Unit "Unità di Analisi dei Segnali e delle Bioimmagini", University of Cagliari, Italy (<https://people.unica.it/uasb/>).

Expert in Medical Physics

Expert for the NIR (Non Ionizing Radiation")

Expert for Magnetic Resonance Safety

Expert for the Medical LASERs Safety

Expert for Electromagnetic Fields Safety

My researches are devoted to developing new methods of integration between imaging and innovative biological techniques (Metabolomics) to improve the quality of diagnosis processes. As Coordinator of the medical Physics Service of the AOUC, my contributions are strictly related to quality safety and cost-effectiveness of healthcare services. From this point of view, my activities are patient-oriented, and I am involved in the specification, selection, acceptance testing, commissioning, quality assurance/control and optimised clinical use of medical devices. Further, my activity regard patient risks evaluation and protection from all associated physical agents (x-rays, electromagnetic fields, laser light, radionuclides activity), including the prevention of unintended or accidental exposures.

Web of Science Researcher ID G-3669-2012

Scopus Author ID 6603032291

Associate Editors

Laura Atzori

Associate Professor in Dermatology

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Antonella Balestrieri

Researcher in Radiology

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Doris Barcellona

Researcher in Internal Medicine

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Francesco Campanella

Department of Occupational and Environmental Medicine, Epidemiology and Hygiene, Worker Compensation Authority (INAIL), Italy

Mauro Carta

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Giulia Cossu

Researcher in Clinical Psychology

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Danial Kahrizi

Razi University, Kermanshah, Iran

Claudia Fattuoni

Researcher in Chemistry

Department of Geological Sciences and Chemistry, University of Cagliari, Italy

Pierpaolo Ferrante

Department of Occupational and Environmental Medicine, Epidemiology and Hygiene, Worker Compensation Authority (INAIL), Italy

Jutta Lindert

Full professor of Public Health at the University of Emden, Germany

Luca Saba

Department of Medical Sciences and Public Health, University of Cagliari, Italy

Ivan Urits

Southcoast Health, Southcoast Physicians Group Pain Medicine, MA, USA

Omar Y. Viswanath

Valley Anesthesiology and Pain Consultants Phoenix, AZ, USA

ARTICLE

Health promoting hospital: A practical strategy to improve patient loyalty in public sector

Minarni Wartningsih,¹ Stefanus Supriyanto,² Sri Widati,³ Ernawaty Ernawaty,² Retno Lestari⁴

¹Doctoral Program of Public Health, Faculty of Public Health; ²Department of Health Policy and Administration Faculty of Public Health; ³Department of Health Promotion and Behavioral Sciences, Faculty of Public Health, Universitas Airlangga, Mulyorejo, Surabaya; ⁴Study Program of Nursing Science, Faculty of Medicine, University of Brawijaya, Malang, Indonesia

Abstract

Background: The Health-Promoting Hospital (HPH) aims to improve the overall quality of health services for patient, families, and the community as a whole, with assessment and intervention as the essential components. In hospitals, this activity needs to be vigorously developed through interdisciplinary teamwork, shared decision-making process, and by involving patients and families during treatment and through the delivery of an evidence-based health promotion process. Previous studies analyzed some steps to improve patient loyalty through the HPH. However, limited studies were carried out on its use in the public sector. This study, therefore, aims to analyze the impact of HPHs to improve patient loyalty in the public sector.

Design and Methods: The simple random sampling method was used to obtain data from 101 respondents in a public hospital, with the cross-sectional design used to gain a better understanding of patient loyalty.

Results: The result showed that HPHs influenced patient expectations ($P=0.030$), which in turn affected perceived value ($P=0.014$) and satisfaction ($P=0.002$). In addition, perceived value and satisfaction have effects on patients' loyalty ($P=0.001$).

Conclusion: In conclusion, HPHs have a positive impact on patient loyalty. Therefore, the public sector needs to enhance its services in accordance with the standards and guidelines.

Introduction

Health-promoting hospital (HPH) aims to improve the quality of health services for patients, families, visitors, stakeholders, and the community as a whole. The hospital plays an active role in delivering comprehensive services, and this is implemented through health promotion, prevention, medical treatment, and rehabilitation. There are lots of difficulties associated with the development of awareness for health and related diseases, there-

fore, HPH encourage patients and families to be involved in the planning procedure as an integral program in hospitals.¹⁻³

In Indonesia, the current implementation of HPH is not yet optimal. Therefore, hospitals need to build a change in management policy, health professionals' competences, and financial budget to foster a successful program. HPH needs to be provided according to the Regulation of the Minister of Health No. 44 of 2018 concerning its implementation. There are 5 dimensions of HPH, which includes promoting good health, preventing illness, educating the patient to improve recovery, enhancing the rehabilitation process, and clinically promoting recovery program.⁴ HPH standards were developed based on the needs of the hospital, to improve its quality of services in an optimal, effective, efficient, integrated, and sustainable manner.⁵

However, there are lots of difficulties associated with its implementation in Indonesia, particularly in public hospitals. According to previous studies, only half of the respondents were satisfied with the program, while just 25.3% of the employees felt satisfied, and 13.5% lacked the training. The fundamental importance of the HPH program is associated with the knowledge, attitude, and skills of patients, families, and communities to actively participate in the program. Other factors include health culture, supportive environment, and participation from stakeholders create better achievement in hospital service quality.³

The four strategies used to build a strong HPH program were as follows: (1) fulfilling patient needs, (2) facilitating the rights of healthcare staff, (3) encouraging hospital management to develop health promotion, and (4) planning to meet community needs and resources.⁶ Other study demonstrated that more than half of the respondents were satisfied with two components of HPH: 53.12% patient assessment and 62.5% intervention. This means that the hospital has difficulties in managing health promotion as they were more focused on medical treatment.⁷ HPH program create many health benefits, which includes patient expectation, perceived value, satisfaction, and loyalty.

Patients expected and believed that the hospital team members need to understand their problems, respect them, and treat them

Significance for public health

Health-promoting hospital (HPH) aims to improve the quality of health services for patients, families, visitors, stakeholders, and the community as a whole. In Indonesia, the current implementation of HPH is not yet optimal. Limited studies analyzed some steps to improve patient loyalty through the health-promoting hospital, and its use in the public sector. This study describes the impact of HPH to improve patient loyalty in the public sector through expectations, perceived value, and satisfaction.

with dignity, as well as provide them with adequate support and care. They need to be involved in decision makings during treatment. Furthermore, patients and families need compassionate health care professionals to help them manage their health problems. However, their expectation was considered a determinant factor in influencing satisfaction.^{8,9}

Health promotion in hospitals was associated with patient satisfaction ($P=0.001$), therefore, its addition in medical treatment tends to enhance patient behaviors, loyalty, and effective hospital management.^{10,11} However, the HPH program provides better results assuming the management policy has financial regulation and resources for its proper implementation.^{12,13}

The patient experienced that the health care staff provided two essential components in HPH, that is, patient assessment and intervention.⁷ Health promotion in the hospital need to be vigorously developed through interdisciplinary teamwork, shared decision-making processes involving patients and families, and deliver evidence-based health promotion. Previous studies analyzed the steps needed to improve patient loyalty through the HPH, however, limited studies were carried out on its use in the public sector. This study aimed to analyze the impact of HPH to improve patient loyalty in the public sector through expectations, perceived value, and satisfaction.

Designs and Methods

The simple random sampling method was used to obtain data from 101 respondents in a public hospital, with the cross-sectional design used to gain a better understanding of patient loyalty. Respondents were selected based on the inclusion criteria as follows: (1) aged more than 18 years old, (2) willing to participate in the study, (3) hospital visitors. Data analysis was conducted to determine the assessment and intervention effect on patient expectation, on perceived value and satisfaction, as well as on the influence of perceived value and expectation on patient loyalty. A multiple linear regression statistical test was used to determine the relationships between variables, with data analyzed by using SPSS 22.0. The research ethic approval was obtained from the ethics committee of Universitas Ciputra, Surabaya, East Java, Indonesia.

Results and Discussion

Table 1 describes the characteristics of the respondents based on age, sex, education level, employment status, and income. Approximately 59.4% of the respondents were female, 71.3% were diploma/bachelor degree holders, 79.2% worked in the private sec-

tor, and 81.2% earned more than the minimum wages ($>3,500,000$ IDR).

Table 2 and Figure 1 show that HPH influenced patient expectation ($P=0.030$), which in turn affected perceived value ($P=0.014$) and satisfaction ($P=0.002$). In addition, perceived value and satisfaction have effects on patients' loyalty ($P=0.001$). Based on the results of the study, assessment, and intervention affected patient expectations. They had a significant effect with a P -value of 0.008 and 0.042, respectively. These expectations are also a reflection of the services/products perceived from previous consumption experiences and predictions regarding the hospital's ability to convey quality in the future.¹⁴

The patient expectation is similar to a customer's confidence before trying or buying a product that is used as a standard or reference in assessing its performance. This comparison led to consumer reactions to products/services in the form of satisfaction or perceived quality.¹⁵ In hospitals, products are in the form of health promotion, and prospective patients tend to compare the conducted assessments with the interventions. The comparison process makes prospective patients show their expectations with reactions in the form of satisfaction or dissatisfaction.

Perceived value is defined as the overall assessment of the patient with regards to the treatment they received.¹⁶ It plays an important role in making patients loyal to a public hospital. This theory, in accordance with this study, led to influence between

Table 1. Characteristics of respondents.

Characteristics	Frequency (n=101)	Percentage
Sex		
Male	41	40.6
Female	60	59.4
Age (years)		
18 – 34	40	39.6
35 – 50	39	38.6
>50	22	21.8
Education		
High School	29	28.7
Diploma/Bachelor	72	71.3
Employment status		
Public sector	8	7.9
Private sector	80	79.2
Jobless	13	12.9
Income		
<3,500,000 IDR	19	18.8
$\geq 3,500,000$ IDR	82	81.2

Table 2. Impact of health promoting hospital on patient loyalty

Independent variable	Dependent variable	P value (partial)	B	P value (simulant)
Assesment	Patient expectation	0.008*	0.264	0.030**
Intervention	Patient expectation	0.042*	0.160	
Patient expectation	Perceived value	0.014	0.404	
Patient expectation	Patient satisfaction	0.002	0.606	
Perceived value	Patient loyalty	0.009*	0.039	0.001**
Patient satisfaction	Patient loyalty	0.000*	0.705	

*p value based on coefficient table (partial effect); **p value based on ANOVA table (simulant effect).

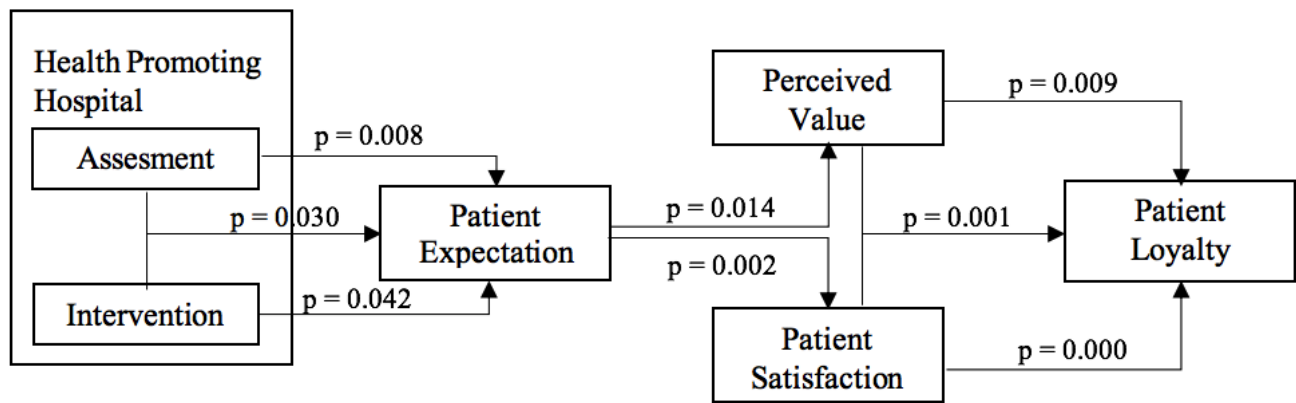


Figure 1. Impact of health promoting hospital to patient loyalty.

patient expectation on perceived value ($P=0.014$). The results of this study are in line with previous studies, which revealed that perceived quality and customer exposition influenced value.^{17,18} Similarly, perceived value also directly affects patient loyalty ($P=0.009$).

This study found that patient expectation influenced their satisfaction ($P=0.002$). The result is consistent with the previous studies, which perceived that the quality of patients, expectations, and perceived value had significant effects on their satisfaction.^{19,20} In addition, patient satisfaction is the level of one's feelings after comparing perceived performance.²¹ It is determined by service performance in meeting patient expectations.²² This study shows that if the hospital has made efforts to improve HPH, and meet the expectations of patients, it creates more satisfaction. Satisfied patients are more likely to recommend the hospital to the closest person ($P=0.000$).

Meanwhile, the interaction between perceived value and satisfaction, which influences patient loyalty ($P=0.001$), shows that the hospital needs to pay attention to their needs and value in relation to visitors and the community around the hospital against HPH program. Therefore, health care providers need to be able to understand patient needs in order to achieve the highest level of satisfaction as it is the main goal of quality health services.

Conclusions

In conclusion, HPHs have positive impacts on patient loyalty. Therefore, it is recommended that public hospitals enhance health promotion in their services in accordance with the standards and guidelines.

Correspondence: Stefanus Supriyanto, Department of Health Policy and Administration, Faculty of Public Health, Universitas Airlangga, Jl. Mulyorejo, Surabaya, Jawa Timur 60115, Indonesia
Tel.: +62315920948 - Fax: +62315924618
E-mail: stefprijanto49@gmail.com

Key words: Health promoting hospital; patient loyalty; public sector.

Contributions: MW, SS, SW designed the project, the main conceptual ideas and proof outline, EE, RL contributed to the interpretation of the results, and took the lead in writing the manuscript. All authors provided critical feedback and helped figured the manuscript.

Conflict of interest: Declare no potential conflict of interests.

Funding: This study was supported by Universitas Airlangga.

Acknowledgments: I would like to thank my supervisors, Prof. Stefanus Supriyanto and Dr. Sri Widati, for the patient guidance, encouragement and advice they have provided throughout my time as their student.

Clinical trials: This study does not involve any clinical trials.

Conference presentation: Part of this paper was presented at the 4th International Symposium of Public Health, 2019 October 29-31, Griffith University, Gold Coast, Australia.

Received for publication: 6 March 2020.

Accepted for publication: 13 June 2020.

©Copyright: the Author(s), 2020

Licensee PAGEPress, Italy

Journal of Public Health Research 2020;9:1832

doi:10.4081/jphr.2020.1832

This work is licensed under a Creative Commons Attribution NonCommercial 4.0 License (CC BY-NC 4.0).

References

1. Amiri M, Khosravi A, Riyahi L, et al. The Impact of Setting the Standards of Health Promoting Hospitals on Hospital

- Indicators in Iran. *PLoS One* 2016;11:e0167459.
2. Afshari A, Mostafavi F, Keshvari M, et al. Health promoting hospitals: a study on educational hospitals of Isfahan, Iran. *Health Promot Perspect*. 2016;6:23-30.
 3. Tatang ER, Mawartinah T. Evaluation Study of Health Promotion Hospital (HPH) in Muhammadiyah Hospital in DKI Jakarta, Indonesia. *Jurnal Kesehatan Masyarakat* 2019;14:410-18.
 4. Ministry of Health. Peraturan Menteri Kesehatan No. 44 Tahun 2018 tentang Penyelenggaraan Promosi Kesehatan Rumah Sakit. Jakarta: Ministry of Health; 2018.
 5. Pezeshki MZ, Alizadeh M, Nikpajouh A, et al. Evaluation of the health promotion standards in governmental and non-governmental hospitals in East-Azerbaijan. *Med J Islam Repub Iran* 2019;33:113.
 6. Kar S, Gautam R, Lakshminarayanan S. Health Promoting Hospital: A Nobel Concept. *National Journal of Community Medicine* 2012;3:558-62.
 7. Hamidi Y, Hazavehei SMM, Karimi-Shahanjarini A, et al. Investigation of health promotion status in specialized hospitals associated with Hamadan University of Medical Sciences: health-promoting hospitals. *Hospital Practice* 2017;45:215–221.
 8. Lateef F. Patient expectations and the paradigm shift of care in emergency medicine. *J Emerg Trauma Shock* 2011;4:163-7.
 9. Farooqi JH. Patient Expectation of General Practitioner Care. *Middle East Journal of Family Medicine* 2005;3. Available from: <http://www.mejfm.com/journal/July05/Patient-Expectations.htm>. Accessed on: 12 January 2020.
 10. Rega PP, Roberts SM, Khuder S, et al. The Delivery of a Health Promotion Intervention by a Public Health Promotion Specialist Improves Patient Satisfaction in the Emergency Department. *Acad Emerg Med* 2012;19:313–317.
 11. Azarnoosh M, Amiri M, Riahi L, et al. Health promoting hospitals: A case study in Iran. *J Bas Res Med Sci* 2016;3:37-44.
 12. Mchugh C, Robinson A, Chesters J. Health promoting health services: a review of the evidence. *Health Promot Int* 2010;25:230–237.
 13. Taghdisi M, Poortaghi S, Suri-J V, et al. Self-assessment of health promoting Hospital's activities in the largest heart Hospital of Northwest Iran. *BMC Health Serv Res* 2018;18:572.
 14. McDougall G, Levesque T. Customer satisfaction with services: putting perceived value into the equation. *J Serv Market* 2000;14:392-410.
 15. Hellier PK, Geursen GM, Carr RA, et al. Customer repurchase intention: a general structural equation model. *Eur J Mark* 2003;37:1762-800.
 16. Schommer-Aikins M, Hutter R. Epistemological beliefs and thinking about everyday controversial issues. *J Psychol* 2002;136:5-20
 17. Fatima T, Malik SA, Shabbir A. Hospital healthcare service quality, patient satisfaction and loyalty: An investigation in context of private healthcare systems. *Int J Qual Rel Manag* 2018;35:1195-1214.
 18. McMullan R. Service Quality vs Price: The Moderating Role of Customer Loyalty. *J Consum Behav* 2005;4:425-44.
 19. Gastelurrutia M, Vicente O, Erauncetamurgil O, et al. Customers' expectations and satisfaction with a pharmacy not providing advanced cognitive services. *Int J Clin Pharm* 2006;28:374-6.
 20. Kondasani R, Panda R. Customer perceived service quality, satisfaction and loyalty in Indian private healthcare. *Int J Health Care Qual Assur* 2015;28:452-67.
 21. Shabbir A, Malik S. Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan. *Int J Qual Rel Manag* 2016;33:538-57.
 22. Ahmed S, Tarique K, Arif I. Service quality, patient satisfaction and loyalty in the Bangladesh healthcare sector. *Int J Health Care Qual Assur* 2017;30:477-88.