THE ROLE MODEL OF HEALTH TRUST IN IMPROVING BPJS SERVICE UTILIZATION: META-ANALYSIS

Irma Finurina Mustikawati[1], Endang Sutisna Sulaeman[2], Achmad Arman Subijanto[3], Suminah[4]
Universitas Sebelas Maret, Indonesia[1234]
irmafinurina@yahoo.com, sutisnaend_dr@yahoo.com, subijanto@staff.uns.ac.id, suminah@staff.uns.ac.id

ABSTRACT

Health is an investment for the community, because health is the basic capital needed by all people to be able to work according to their respective duties and responsibilities, so as to produce something that is beneficial to themselves and their families. This research uses meta-analysis method. Global and domestic literature searches leveraging the EBSCO, ScienceDirect, and Proquest databases. Based on the findings from this study, it can be concluded that HBM can help identify significant determinants of health behavior and address issues related to privacy and confidentiality, which are important factors in influencing people's intention to use online services. However, the process of adopting e-services in Indonesia may be hampered by low government trust, which requires further attention and efforts from policy makers.

Keywords: Service, HBM Model, BPJS

INTRODUCTION

Health is an investment for the community, because health is the basic capital needed by the entire community to be able to work in accordance with their respective duties and responsibilities, so as to produce something useful for themselves and their families. But if health problems are not possible, all property and wealth will be used to obtain health. Law of the Republic of Indonesia Number 23 of 1992 concerning Basic Health states that people's health is one of the main capitals in the framework of nation building and has an important role in solving national health. and the readiness of the Indonesian people. So the government must strive for the health sector as well as possible, providing adequate health services and easily accessible to the general public (Cahyati, 2021).

Based on data from the Social Security Organizing Agency (BPJS) Health in 2019, the number of participants was 221,580,743 people. The addition of JKN-KIS participants per year averages 12-14 million people. While at the service point, visits to FKTP average around 400,000 visits per day, while visits to hospitals are around 26,000-27,000 visits per day. As the implementing institution of the JKN system, BPJS Kesehatan develops an information technology-based system as an effort to improve the quality of services for participants and health facilities (Prasetyowati &; Rahadiyanto, 2017). The information technology system is in the form of an application known as Primary care (Pcare). This application is in mobile form or can be downloaded by BPJS participants on smartphones so that users can enjoy the application and carry out routine user activities (Wahana, 2014). With this application, BPJS users or participants can get five conveniences, namely registering and changing membership data, knowing participant and family data information, knowing billing and payment information, getting services at health

facilities (health facilities) and submitting complaints and requests for information. about JKN-KIS (Putri, 2019).

This application can monitor health service activities for JKN participants and BPJS Kesehatan can monitor and evaluate directly the number of visits and referral numbers, thereby reducing unnecessary health services because people cannot go directly to the hospital if their disease condition does not require intensive care. In addition, P-care functions to check the validity of BPJS membership for patients who come for treatment to the puskesmas, store data on services that have been provided to BPJS patients, issue patient referral letters to advanced health facilities and recapitulate data on services provided. by puskesmas to be submitted to BPJS as a report (Santoso &; Pramono, 2018).

But behind its ease of use, this application is still not effective for BPJS participation in making it easier for patients to get services both at the elementary and tertiary levels. But in fact, many patients who will provide health services at the puskesmas turn out to have an inactive membership card because participants do not follow BPJS policies. The Health Belief Model (HBM) theory was proposed by Rosenstock in 1966, then refined by Backer, et al in 1970 and 1980.

HBM predicts behavior as a result of beliefs which are individual perceptions of perceived susceptibility, perceived seriousness, perceived benefits and perceived barriers to fighting disease. This action will depend on the perceived benefits and obstacles found in performing the action but in general the benefits of the action are more decisive than the obstacles that may be found in performing the action, and the things that motivate the action (cues to action).) derived from outside information or advice about health problems.

Based on the background above, research questions were formulated using the PICO format as follows:

P: How does the application of the health trust model (HBM) affect recipient patients benefits of BPJS who need health services?

I: Health Trust Model (HBM)

C: No health trust model (No HBM)

O: Increase the use of BPJS services.

RESEARCH METHOD

This research method uses qualitative methods. The method used is meta analysis. Where meta-analysis is a research method used to combine the results of research that has been done previously related to the same research topic. By conducting a meta-analysis, researchers can evaluate all available evidence, identify patterns that emerge from the results of these studies, and come up with stronger conclusions than the results of a single study (Mohan et al., 2022).

In conducting a meta-analysis, there are several stages of analysis that must be carried out, including:

1. Establishment of study inclusion and exclusion criteria At this stage, the researcher determines the criteria for selecting studies to be included in the analysis. These criteria include the type of study, year of publication, language of publication, and so on.
   The inclusion criteria of this study are:
   a. Indonesian or English
   b. There is no difficulty of years of research
   c. Research topics on improving health services.
   d. While the exclusion criteria from this study are as follows:

e. Languages other than Indonesian or English
f. The research topic did not improve on health services.

2. Literature search Researchers conduct literature searches in accordance with predetermined inclusion and exclusion criteria. Searches can be done through electronic databases such as Pubmed, Google Scholar, and ProQuest. In the initial search of journal articles with keywords "health services", "BPJS", "service improvement".
3. Selection Study After conducting a literature search, researchers conducted a study search based on predetermined inclusion and exclusion criteria. Studies that meet the inclusion criteria will be included in the analysis.
4. Data extraction Researchers select relevant data from each selected study. The data taken can include sample size, variables studied, research results, and so on.
5. Data analysis At this stage, researchers conduct statistical analysis to combine the results of research that has been extracted. The analysis carried out can be in the form of meta-regression, meta-analysis of random effects or fixed effects, heterogeneity tests, publication bias tests, and so on.
6. After analyzing the data, the researcher hides the results of the combined studies. These results are then used to generate stronger conclusions about the relationship between the variables studied.

RESULTS AND DISCUSSION

The health trust model (HBM) was first introduced by a group of social psychologists from the U.S. Public Health Service in the 1950s. Initially, HBM consisted of two main dimensions: threat perception and expectation. Perceived threats involve and perceived severity (PSV) and perceived vulnerability (PSU), whereas perceived expectations consist of perceived benefits (PBE) and perceived barriers (PBA). Along the way, this model evolved with the emergence of several other constructs such as cues to action (CUE), self-efcacy (SE), and general beliefs about health problems (HC) (Moghadam et al., 2020).

With the addition of this construct, HBM is believed to have more substantial explanatory powers, especially regarding citizens' intentions to use (IU) government electronic services. The two constructs in HBM that researchers most often use to determine people's perception of disease are perception of susceptibility (PSU) and perception of severity . Perceived severity (PSV) is a person's perception of how serious the Covid-19 problem is. If they contract Covid19, the impact on their routine will be disrupted. The higher individuals see the Covid-19 problem, they are likely to avoid face-to-face meetings and prefer to use government e-services for their needs. Meanwhile, perceived suceptibility (PSU) is a person's perception of the risk of contracting a disease. By coming directly to government offices, citizens have the opportunity to meet many people, so the possibility of contracting the virus will be higher. It will undoubtedly encourage people to use electronic services instead of conventional services to avoid contagion (Hong et al., 2021).

Based on the collected articles, it is known that Taherdoost (2018) developed a model to assess citizens' acceptance of e-service technology. Their study revealed that security and satisfaction significantly influence the intention to use e-services and the acceptance of e-service technology in Malaysia. Lopes et al. (2019) found four main keys that can increase the adoption of electronic public services by citizens in Brazil: collaborative processes, government readiness, e-service design, and citizen trust. In the context of developed countries, several factors such as internet trust, government trust, perceived ease of use, perceived usability, and perceived risk are used as models to see the influence of intent to use government electronic services (Carter et al.,

2016; Distel et al., 2021). In Greece, there is a relevant study conducted by Balaskas et al. (2022). They investigated the influence of trust factors and technology acceptance on the use of e-government services during the pandemic, and suggested a model that integrates factors adapted from the TAM model (social influence, performance expectations, and effort expectations) with trust in e-government. . This study also took the background of the Covid-19 pandemic like our study, but they used the trust variable as a mediator while our study used trust as a moderator.

Based on Cahyati (2021), the results of the study can be seen that there is a degree of variable contribution of service provision to patient trust through patient satisfaction. The better the delivery of services provided by Puskesmas Purbaratu Kota Tasikmalaya, the better the patient satisfaction received, which in turn will have an impact on increasing patient trust in Puskesmas Purbaratu Kota Tasikmalaya.

The use of administrative services, especially during the Covid19 pandemic, can avoid crowds in the waiting room. BPJS Kesehatan participants should download and install the JKN mobile application on mobile devices to get easy access to health services and provide services online and offline so that access to health services can be done as much as possible.

Researchers	Sample	Influencing factors	Theory/model
Balaskas et al. (2022)	Greek	Social influence, performance expectations, effort expectations, trust in e-government, trust in the internet, security and privacy	TAM + trust
Distel et al. (2021)	German	Trust	Trust
Lopes et al. (2019)	Brazil	Collaborative processes, government readiness, e-service design, citizen trust	Institutional theory + trust
Taherdoost (2018)	Malaysia	Quality, safety and satisfaction	Reception technology
Carter et al. (2016)	United Kingdom and United States	Internet trust, government trust, perceived ease of use, perceived usability, perceived risk	Theory of reasoned action (TRA), TAM, belief
Cahyati (2021)	Indonesian	Patient Trust.	Service Delivery, Patient Satisfaction
Efendy et al. (2022)	Indonesian	Efficiency, Reliability, Compliance, Privacy	Satisfaction

DISCUSSION

HBM, has identified significant determinants of health behavior. In general, citizens who use government e-services during the pandemic are related to the inconvenience of providing personal information online. By requesting as little personal information as possible, users' privacy rights to e-services are protected and willingness to use applications (government e-services) will increase.

The health belief model (HBM) considers factors that influence a person's health behaviors, such as perceptions of disease risk, perceptions of benefits from health behaviors, and barriers that hinder health behaviors. In the context of utilizing BPJS services, the application of HBM can help BPJS beneficiary patients to understand the benefits of using health services through BPJS,

minimize the risk of disease by taking appropriate preventive measures, and overcome obstacles that hinder access and utilization of health services through BPJS.

The studies included in the meta-analysis show that the application of HBM can improve patients' knowledge, attitudes, and intentions to use health services through BPJS. This is supported by research results that show that patients who have a risk of positive perception of the benefits of health services through BPJS and have a high perception of disease tend to take advantage of these services more.

However, there are other factors that need to be considered, such as the level of public trust in the government and health services through BPJS. A low level of trust can hinder the implementation of HBM in increasing the utilization of BPJS services. Therefore, efforts need to be made to increase public trust in health services through BPJS, for example by improving service quality and providing accurate and transparent information to the public.

In this case, the implementation of the health trust model (HBM) can be one of the strategies to increase the utilization of BPJS services, but it needs to be balanced with other efforts that can increase public trust in health services through BPJS. The HBM is proven to encourage the public to use government electronic services to reduce cases of Covid-19 transmission. However, with low government trust, the process of e-service adoption takes a long time.

Coming directly to a health facility to get physical health examination services and treatment is indeed very good, but it would be even better if every participant of the Social Security Organizing Agency (BPJS) health, especially JKN-KIS patients with outpatient referrals, register (online queue) first through the JKN mobile application from home to avoid crowds in the waiting room of health facilities, especially during the Covid-19 pandemic which spread so quickly, impacting all lines and sectors of life, making people have to change activity patterns. by limiting in-person interaction and maintaining distance. Over time, mobile JKN also added advanced features, including the Doctor Consultation menu. With this menu, participants can communicate with doctors at certain FKTPs, without having to meet face to face so as to minimize Covid-19 transmission and participants from the Social Security Organizing Agency (BPJS) health simply work from home (Sisiperdani et al., 2020).

Efficiency, which is part of the quality of JKN mobile application online services, ideally provides the best comparison between what BPJS Kesehatan participants do with the results carried out (service output) so that it can be said that the JKN mobile application can produce something expected or planned through information about the health services needed. In the current era of globalization, it is not surprising that advances in information and communication technology can promise efficiency, speed of information delivery, affordability, and transparency, including health services. Innovation like this is needed by developed countries (Cascio and Montealegre, 2016).

Before the JKN mobile application was released, all administrative management of BPJS Kesehatan had to be completed at the BPJS Kesehatan office, but now it is easier and more practical because the JKN mobile application is available. Efficiency (convenience) is the reason people use JKN-KIS because it can be accessed via JKN mobile (Wulanadary, et al, 2019). Innovation to facilitate participants of the Health Social Security Organizing Agency (BPJS) in obtaining health services is also part of the government's efforts to ensure the highest degree of health as a form of general welfare through the health system in Indonesia.

CONCLUSION

Based on the findings of this study, it can be concluded that the Health Belief Model (HBM) is an effective approach in encouraging people to use government electronic services, especially during the COVID-19 pandemic. HBM can help identify significant determinants of health behaviors and address issues related to privacy and confidentiality, which are important factors in influencing people's desire to use online services.

However, the process of e-service adoption in Indonesia may be hampered by low government trust, which requires further attention and effort from policymakers. In addition, the use of the JKN mobile application can provide a more efficient and convenient way for participants of the Health Social Security Organizing Agency (BPJS) to get health services, especially during a pandemic, by avoiding crowded waiting rooms and minimizing face-to-face. face interaction.

Overall, the study highlights the importance of using innovative approaches such as HBM and mobile apps to improve access and efficiency in healthcare delivery, especially during the ongoing pandemic.

REFERENCES

Balaskas, S., Panagiotarou, A., Rigou, M. (2022). The infuence of trustworthiness and technology acceptance factors on the usage of e-government services during COVID-19: a case study of post COVID-19 Greece. Adm Sci. 12(129):1–25. https://doi.org/10.3390/admsci12040129

Cahyati, Peni. (2021). The Model Of Patient Satisfaction And Trust: A Study At BPJS Patient. Dinasti International Journal of Education Management And Social Science. 2. 513-526. 10.31933/dijemss.v2i3.762.

Carter, L., Weerakkody, V., Phillips, B., Dwivedi, Y.K. (2016) Citizen adoption of e-government services: exploring citizen perceptions of online services in the United States and United Kingdom. Inf Syst Manag 33(2):124–140. https://doi.org/10.1080/10580530.2016.1155948

Cascio, Wayne & Montealegre, Ramiro. (2016). How Technology Is Changing Work and Organizations. Annual Review of Organizational Psychology and Organizational Behavior. 3. 349-375. 10.1146/annurev-orgpsych-041015-062352.

Distel, B., Koelmann, H., Schmolke, F., Becker, J. (2021). The role of trust for citizens' adoption of public e-services, vol 13(2).

Efendy, I., Nyorong, M., Amirah, A., Sari, F. (2022). National Health Insurance (JKN) Mobile Application Use Towards Satisfaction of Participants of the Health Social Security Implementing Agency (BPJS) in Madani Hospital in Medan City. Journal of Medical and Health Studies.

Hong, C., Choi, H., Choi, E.K., Joung, H.W. (2021) Factors afecting customer intention to use online food delivery services before and during the COVID-19 pandemic. J Hosp Tour Manag 48:509–518. https://doi.org/10.1016/j.jhtm.2021.08.012

Lopes, K.M.G., Macadar, M.A., Luciano, E.M. (2019). Key drivers for public value creation enhancing the adoption of electronic public services by citizens. Int J Public Sect Manag 32(5):553–568. https://doi.org/10.1108/IJPSM-03-2018-0081

Moghadam, M.T., Raheli, H., Zarifan, S., Yazdanpanah, M. (2020). The power of the health belief model (HBM) to predict water demand management: a case study of farmers' water conservation in Iran. J Environ Manag. https://doi.org/10.1016/j.jenvman.2020.110388

Mohan, B.P., Chandan, S., Siau, K. (2022). Young GI angle: how to learn & conduct meta-analysis: Tips & tricks for the emerging researcher. United European Gastroenterol J, 10(9): 1031–5. https://doi.org/10.1002/ueg2.12322

Prasetyowati, A., &; Rahadiyanto, C. (2017). Bridging Design of Primary Care Information

System (P-Care) for Practicing Doctors in Semarang City. Indonesian Journal of Health Information Management (JMIKI), 5(2), 127–137.

Putri, P. H. (2019). Analysis of user acceptance of the mobile application jkn health social security organizing agency using the unified theory of acceptance and use of technology model (Bachelor's thesis, Faculty of Science and Technology, Syarif Hidayatullah State Islamic University Jakarta)

Santoso, D. B., &; Pramono, A. E. (2018). Health Information Technology II. Ministry of Health of the Republic of Indonesia.

Sistiaperdani, Resly & Zubaedah, Cucu & Wardani, Riana & Hayati, Ayu & Carolina, Dyah. (2020). The relationship between Social Security Administrator (BPJS) regulations and the value of benefits obtained by Social Security Administrator for Employment (BPJS Ketenagakerjaan) participants. Padjadjaran Journal of Dentistry. 32. 10.24198/pjd.vol32no2.24045.

Taherdoost, H. (2018). Development of an adoption model to assess user acceptance of e-service technology: e-service technology acceptance model. Behav Inf Technol 37(2):173–197. https://doi.org/10.1080/0144929X.2018.1427793

Wahana, K. (2014). Build Cross Platform Mobile Applications with Phonegap. PT Elex Media Komputindo.

Wulanadary, Ayu &; Sudarman, Sudarman &; Ikhsan, Ikhsan. (2019). BPJS Kesehatan Innovation in Service Delivery to the Community: JKN Mobile Application. Journal of Public Policy. 5. 98. 10.35308/jpp.v5i2.1119