Measuring the service quality of BPJS health in Indonesia: a sharia perspective

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Abstract

Purpose – The purpose of this study is to identify the factors that were considered important by Muslim BPJS participants of service quality received when using BPJS Health card for hospitalization services.

Design/methodology/approach – The sample consisted of 250 respondents that came from five hospitals in Indonesia. The variables used in this study modify SERVQUAL, PAKSERV and CARTER models.

Findings – The results of this study indicate that there are ten factors that are considered very important by Muslim BPJS participants for hospitalization service, with the dominant variables of each factor being sincerity/sincerity of employees in serving BPJS participants, the amount of drugs cost borne by BPJS participants, cleanliness in the hospital building, tabligh attitude in serving BPJS participants (wise and right on target), reputation of BPJS doctors in the hospitals, affordability of the hospital location, compliance and accuracy of payment claim/treatment for BPJS patients, BPJS compliance with Islamic principles, the ability of BPJS to reliably deliver promised services and availability of mosque at BPJS referral hospital.

Originality/value – The new factors that have emerged are location access, information and availability of praying facilities. The sincerity and formality factors are considered very important by the Muslim community when using BPJS Health card for hospitalization service.

Keywords Service quality, SERVQUAL, PAKSERV, CARTER, Sharia perspective, BPJS health

Paper type Research paper

Introduction

Indonesia is a country with the fourth largest population in the world. Large population causes many problems, including health issues. According to the Legatum Prosperity Index report (2017), Indonesia is ranked 101 from 149 countries in the Global Health Index. This means that the health quality in Indonesian is still low, thus the importance of health sector management (Bennington, 2010). One of the Government efforts to improve public welfare is by establishing a business entity that manages the National Health Insurance, formerly known as ASKES.

Starting from January 1, 2014, PT. ASKES Indonesia has changed its name to Social Insurance Administration Organization (BPJS) Health and around 116,122,065 Indonesian citizens automatically become BPJS participants. From the total number of BPJS participants, those from ASKES participants were 16.4 million civil servants (PNS), retired civil servants, retired TNI (Indonesian National Army) and Polri (National Police) and independence pioneers.

Until today, BPJS Health has been in great demand by the public, either in the lower, middle or upper society. However, the research performed by Kholis, Noor dkk (2015) concluded that the society is not satisfied with BPJS service. There is a significant difference between the consumer expectations before using BPJS and the service that is truly felt when

using BPJS facilities. This result means that BPJS participants are not satisfied with the service they received. On the other hand, several *ulama* (scholars) who are members of Indonesian Ulama Council (MUI) assume that there are several issues in BPJS performance that are not in line with Islamic teachings. In other words, BPJS Health service does not reflect the ideal concept of social security in Islam.

Every Indonesian citizen is expected to join BPJS Health. Ultimately, BPJS Health is able to accommodate the interests and expectations of the society, the expectation of *ulama* and those of BPJS participants who are mostly Muslims. Based on this phenomenon, this research aims to examine the factors that are considered important by Muslim BPJS participants of service quality received. This research will also study if the service of BPJS Health is in line with Sharia principles.

Service quality is a necessity for BPJS to be able to survive and still gain the trust of its participants. The success of BPJS in providing service quality can be measured using the service quality approach developed by Othman and Owen (2001). The research developed a model of service quality measurement based on Sharia principles, using the CARTER model.

ASKES has been reformed into BPJS Health. In comparison, Li *et al.* (2012) measure society satisfaction on public health services as a result of health-care system reform using four dimensions, such as health insurance system, medical provision, health service clinic and general health service.

This study examines BPJS service based on the Sharia perspective, namely, BPJS service at its partner hospitals. BPJS is social insurance that does not seek profit and is more about providing protection to the community. Service quality should start from customer needs and end with customer perception (Kotler and Kellen, 2012). This means that a good service quality should not be seen from the service provider's perspective, but based on the customer perspective. Thus, the needs of BPJS's patients and partners must be well noticed if it wants to offer a good service quality.

To improve the service of BPJS Health, it is necessary to evaluate the implementation of BPJS. Evaluation from the BPJS participants' side can be done by monitoring the level of services needed that are considered important by BPJS participants. Knowing that the majority of Indonesians are Muslims, as BPJS participants, it is necessary to conduct research to find out the BPJS services which are considered important for BPJS participants based on Islamic perspective. The evaluation from the implementers or partners' side can be seen from the BPJS institution in implementing its everyday operations. Therefore, it is needed to know the provision of BPJS service seen from Sharia basis.

The evaluation of the implementation of the BPJS Health program is very interesting to study because BPJS is a Government-formed institution that originates from the fusion of several health insurances with the aim of being formed to improve the level of public health in Indonesia. BPJS Health is a state-owned enterprise (BUMN) that is newly established so that the researchers believe that there has not been much research related to BPJS Health, especially related to BPJS services based on an Islamic perspective.

Based on the description above, this study intends to identify factors that are considered important by BPJS Muslim participants of the service quality received when using BPJS Health card for hospitalization services. Measuring the quality of hospital services is an important strategy for managers who want to improve service quality. Measurements can be made through various instruments. We combined the SERVQUAL model, CARTER model and PAKSERV model to measure the service quality in hospitals that applied the BPJS Health program, where dimensions are reviewed based on Islamic rules (*Shari'a* principles).

Literature review

Service

Quality is the comparison between expectation and performance (Parasuraman *et al.*, 1985). Service quality is defined as the result of a process in which consumer expectation on a service is compared to the actual service they received (Babakus and Mangold, 1992). Expectation is formed as a result of previous experience received by consumers, word-of-mouth communication, news, the company's and competitors' marketing efforts and personal needs (Babakus and Mangold, 1992; Parasuraman *et al.*, 1985). After expectations are formed, consumers will provide a comparison standard or frame of reference that will assess the company's service performance.

Services to customers play an important role in every organization. Without services, it is impossible to conduct business transactions (Khan *et al.*, 2010). Customers will always expect the organization to provide better service. To measure service quality, in this study, a service quality dimension was developed which was modified from the SERVQUAL, CARTER and PAKSERV models.

SERVQUAL model

Service quality or SERVQUAL is built on the theory that service quality is the gap between customer expectations and the actual performance perceived by customers (Parasuraman *et al.*, 1988). The concept of SERVQUAL was developed by Parasuraman *et al.* (1985) based on ten dimensions. The ten dimensions of service quality are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles. Through their research, Parasuraman *et al.* (1988) have combined SERVQUAL dimensions that originally amounted to ten, becoming five dimensions, as follows:

(1) tangibles is the appearance of physical facilities, equipment, personnel and communication materials;

(2) reliability, i.e. ability to perform promised services reliably and accurately;

(3) responsiveness is the willingness to help customers and provide fast service;

(4) assurance, knowledge and modesty of employees and their ability to convey trust and confidence; and

(5) empathy, i.e. giving attention to the customer.

Madhura Prabhu and Iyer (2018) used the SERVQUAL model to assess the service quality of hospitals in India. From the five dimensions in the SERVQUAL model, reliability plays a greater role when patients receive services at the hospital. Meanwhile, Shafiq *et al.* (2017) developed a service quality model in public and private hospitals in Asian countries such as Pakistan by using modified SERVQUAL dimension. This study evaluates the patient's understanding about services that they receive and then compares with their expectations. As a result, the quality gap between services and expectations is written sequentially, namely reliability, tangibility, responsiveness, empathy and assurance.

Shafiq *et al.* (2017), Madhura Prabhu and Iyer (2018) and also other researchers such as Kholis *et al.* (2018) used the SERVQUAL dimension to assess the satisfaction of BPJS patient with the service quality of hospitals in Indonesia. The highest satisfaction level of BPJS is on the dimension of empathy, while the lowest satisfaction level is on the dimension of the assurance system.

In this study, the dimensions of the SERVQUAL model will be modified and will be reviewed based on Sharia principles.

CARTER model
The benchmark to assess the service quality to the consumer in the Islamic perspective is based on Sharia standardization. Hence, the variables tested are not purely using the conventional theory, but make the Sharia as a standard assessment of the theory.

Continuing Parasuraman's research on SERVQUAL, Othman and Owen (2001) examine the service quality based on the Islamic perspective. The benchmark to assess the service quality to the consumer in the Islamic perspective is based on Sharia standardization; hence, the variables tested are not purely using the conventional theory but make the Sharia a standard assessment of the theory. Therefore, Othman and Owen (2001) developed a service quality measurement model in the banking system that is based on Sharia principles, using the CARTER model. The CARTER model can also be used to measure the institution's service quality that makes Sharia the basis of their organization. The following are the six dimensions in the CARTER model:

(1) compliance which means the ability to fulfill sharia principles and operate under Islamic banking and economic principles;

(2) assurance is the knowledge and politeness of employees and their ability to convey trust and confidence;

(3) reliability is the ability to provide promised services, reliability and accuracy;

(4) tangible which means the appearance of physical facilities, equipment, personnel and communication materials;

(5) empathy refers to individual's care and attention given by Islamic banks to their customers; and

(6) responsiveness means the willingness to help customers and provide fast service.

Othman and Owen (2001) use the above CARTER model to measure the service quality of Sharia Bank in Kuwait. The results show that Sharia banking must improve the financial service because of the strong competition between the banks and the rapidly growing technology. Banks must begin to establish strategies to provide a good quality of products and maximum service for customer satisfaction.

Abedniya and Zaeim (2011) measure the perceived service quality using the difference between customers' expectation and perception in Islamic banking system in Malaysia. This study uses the CARTER instrument to measure perceived service quality. The results showed that there was a gap between service expectation and service perception. The results also show that service expectation and service perception can influence perceived service quality.

Ali (2018) uses dimensions of the modified CARTER model to test the relationship between service quality and customers' perception. The CARTER model is modified using two additional dimensions: corporate social responsibility and innovation. Therefore, the service quality dimension used is eight. This study takes the data from 155 Brunei Darussalam Islamic Bank (BIBD) customers from Muara district of Brunei. The results showed that service quality and customer perception have a significant relationship. Another result is that the CARTER model can be used in the Islamic banking system in Brunei.

Fauzi and Suryani (2018) explained the importance of the CARTER model in improving the quality of Sharia banking services in Indonesia. The CARTER model is significantly proven to be a service quality dimension that is suitable for Islamic banking. The dimensions that affect customer satisfaction in Islamic banking in Indonesia sequentially

are the dimensions of reliability, empathy, responsiveness, assurance, tangibility and compliance.

The CARTER model (Othman and Owen, 2001) is a continuation of the SERVQUAL model (Parasuraman *et al.*, 1988). The difference between CARTER and SERVQUAL models is the presence of compliance dimension in the CARTER model. The CARTER model, as described above, has been used to see the service quality in various banks (Fauzi and Suryani, 2018; Abedniya and Zaeim, 2011; Ali, 2018; Othman and Owen, 2001). However, no one has used the CARTER model to measure service quality in hospitals. Therefore, this study tries to use the CARTER model to assess the service quality in hospitals that use BPJS Health card for hospitalization services.

PAKSERV model
PAKSERV is a concept developed from the SERVQUAL theory to measure the service quality that embraces a culture other than western culture, especially similar to Pakistani culture (Raajpoot, 2004). PAKSERV was developed by taking three dimensions of SERVQUAL, namely, tangibility, reliability and assurance, and adding new dimension, namely, sincerity, formality and personalization. The six dimensions of the original PAKSERV model consist of 72 items; these are then tested with factor analysis and 24 items are left that could be used to measure service quality (Raajpoot, 2004).

Kashif *et al.* (2015) develop a model of customer satisfaction and loyalty measurement using the PAKSERV model. Kashif *et al.* (2015) used the PAKSERV model to examine customer satisfaction and loyalty at Bank Islam Malaysia. The results of the study show that the six dimensions of the PAKSERV model, except reliability, are reliable for the Malaysian Sharia banking context. Dimensions of sincerity, personalization and formality should be considered when designing and implementing Malaysia's sharia bank service quality programs. Customers focus more on personalization dimensions. This indicates that customers are more focused on getting advice from bank staff before buying and using the products offered to minimize the various risks associated with the banking services. Employee sincerity and personal knowledge about customers are the key to service relationships. New three dimensions are added to develop the PAKSERV scale to have a very high coefficient when compared to the old SERVQUAL. This is because Malaysians have a high value in terms of collectivism culture, avoidance of uncertainty and power distance. Based on Malaysian cultural orientation, it can be understood that the dimension of sincerity and formality will be more emphasized when compared to the old SERVQUAL dimension. The SERVQUAL dimension of tangibility, reliability, reliability and assurance has a lower coefficient value compared to the three new dimensions of PAKSERV.

Karami *et al.* (2016) use the PAKSERV dimension to examine service quality in cosmetic clinics in Tehran, Iran. In this study, we tested the influence of culture on expectation and the influence of culture and expectation on perception. Dimensions of PAKSERV are used to measure expectation and perception. The results showed that culture had an effect on service quality expectation. The results also indicate that culture and service quality expectations influence the perception of service quality.

Service quality in Sharia principle
As like the CARTER model (Othman and Owen, 2001), service quality in Islam is also measured by using six dimensions (Rivai Zainal *et al.*, 2017). These six dimensions are compliance, reliability, responsiveness, assurance, empathy and tangible.

According to Rivai Zainal *et al.* (2017), compliance is related to the compliance of business people with the rules or laws that have been set by Allah SWT or can also be called

as Shari'a. Shari'a principle is a guideline and a rule made by Allah to the humankind. As stated in QS. Al-maidah: 48:

وَأَنزَلْنَا إِلَيْكَ ٱلْكِتَٰبَ بِٱلْحَقِّ مُصَدِّقًا لِّمَا بَيْنَ يَدَيْهِ مِنَ ٱلْكِتَٰبِ وَمُهَيْمِنًا عَلَيْهِ فَٱحْكُم بَيْنَهُم بِمَآ أَنزَلَ ٱللَّهُ وَلَا تَتَّبِعْ أَهْوَآءَهُمْ عَمَّا جَآءَكَ مِنَ ٱلْحَقِّ لِكُلٍّ جَعَلْنَا مِنكُمْ شِرْعَةً وَمِنْهَاجًا وَلَوْ شَآءَ ٱللَّهُ لَجَعَلَكُمْ أُمَّةً وَٰحِدَةً وَلَٰكِن لِّيَبْلُوَكُمْ فِى مَآ ءَاتَىٰكُمْ فَٱسْتَبِقُوا۟ ٱلْخَيْرَٰتِ إِلَى ٱللَّهِ مَرْجِعُكُمْ جَمِيعًا فَيُنَبِّئُكُم بِمَا كُنتُمْ فِيهِ تَخْتَلِفُونَ [المائدة:48]

> And We have revealed to you, [O Muhammad], the Book in truth, confirming that which preceded it of the Scripture and as a criterion over it. So judge between them by what Allah has revealed and do not follow their inclinations away from what has come to you of the truth. To each of you We prescribed a law and a method. Had Allah willed, He would have made you one nation [united in religion], but [He intended] to test you in what He has given you; so race to [all that is] good. To Allah is your return all together, and He will [then] inform you concerning that over which you used to differ [Al Ma"idah: 48].

In addition, Allah also says in QS. Al Maidah (5): 49 which states that every case must be decided based on Shari'a.

Reliability refers to the ability to provide the promised services accurately. The obligation to keep promises is written in QS. An-Nahl (16): 91 which means:

> And fulfill the covenant of Allah when you have taken it, [O believers], and do not break oaths after their confirmation while you have made Allah, over you, a witness. Indeed, Allah knows what you do [An-Nahl: 91].

Responsiveness means the willingness of employees to provide fast and appropriate services to customers. Providing fast and appropriate services can be done by servicing professionally. In doing work, someone is categorized as a professional if he/she can work according to his/her expertise and abilities (Rivai Zainal *et al.*, 2017). Providing professional services will lead to customer trust. Trust given by customers to the company is a trust that cannot be wasted. This is according to the Hadist:

> Rasulullah saw said: "If the trust is wasted, then wait for its destruction." Someone asked, "how do you waste the trust? Rasulullah saw replied, "When a job is handed over to someone who is not an expert then wait for its destruction" (HR. Bukhari).

Assurance refers to knowledge or insight, politeness and confidence from service providers and respect for customers. Assurance will increase trust, security and be free from risk or danger so that customers feel satisfied. This is in line with QS. Al-Imran: 159:

> So by mercy from Allah, [O Muhammad], you were lenient with them. And if you had been rude [in speech] and harsh in heart, they would have disbanded from about you. So, pardon them and ask forgiveness for them and consult them in the matter. And when you have decided, then rely upon Allah. Indeed, Allah loves those who rely [upon Him] [Al 'Imran: 159].

Empathy is the willingness of employees to care and give individual attention to customers. This willingness is shown through relationships, communication and attention and can understand the needs and desires of customers. This is all done sincerely, as stated in QS. An-Nisa: 146:

> Except for those who repent, correct themselves, hold fast to Allah, and are sincere in their religion for Allah, for those will be with the believers. And Allah is going to give the believers a great reward [An Nisa: 146].

Tangible deals with the physical facilities such as buildings, comfortable rooms and other infrastructure. In the Islamic concept, services related to physical facilities should prioritize customer convenience, not to show luxury (Qs. al-Takatsur: 1-5). Tangible is also related to

the physical appearance of managers and employees in dressing up as *syar'I* (based on Islamic rule), as stated in QS. Al-A'raf: 26:

O children of Adam, we have bestowed upon you clothing to conceal your private parts and as adornment. But the clothing of righteousness - that is best. That is from the signs of Allah that perhaps they will remember [Al A'raf: 26].

Service quality in hospital industry
The dimension of SERVQUAL is often used to measure the service quality in hospital (Babakus and Mangold, 1992; Guiry and Vequist, 2011; Khan *et al.*, 2010; Kholis *et al.*, 2018; Madhura Prabhu and Iyer, 2018; Ratnawati *et al.*, 2016; Shafiq *et al.*, 2017).

Bennington (2010) argues that the management of the health sector is very important because it will affect human welfare and economic sector. Discussing about health management, the scope and scale are various; thus, cultures, economies, politics and other factors will need to be considered.

Ameryoun *et al.* (2017) examine the quality of hospital services in Tehran by measuring the perceived quality of service from the customer's point of view and the impact of service factors on customer perceptions. In this study, we used a modified SERVQUAL approach. The results show that the sequence of factors affecting perceived service quality index (PSQI) is trust in services, followed by tangibles, assurance, empathy and responsiveness.

Kholis *et al.* (2018) examine the public satisfaction of BPJS Health in Indonesia. To measure the society's satisfaction, five SERVQUAL dimensions with 28 attributes are used. The results showed that of the 28 attributes studied, all showed a significant difference between the expectations of BPJS participants with the performance of BPJS service. The highest satisfaction level is on the dimension of empathy with indicators: staff and medical officers do not distinguish between social status and hospitality of staff and medical officer. The dimension of the lowest level of satisfaction is insurance system.

Li *et al.* (2012) conducted a research to measure the society satisfaction with public health service in Shanghai, China, as a result of reformation in health service system. The objective on the research is to evaluate the effect of changes in health-care system reformation by using the society satisfaction analysis, measured using four dimensions, such as: health insurance system, medical provision, basic health-care clinic and general health service. All dimensions show improvement in the level of society satisfaction since the reformation, but difference of satisfaction level in all dimensions and groups is found. The society feels very satisfied with the clinic service, as well as the general health services, and feels less satisfied with the health insurance system and the provision of treatment. The losing parties (parents, unemployed, primary school graduates, the poor) are almost entirely dissatisfied with the four aspects because of the increased financial burden and the more expensive drug.

Meanwhile, Swain and Kar (2017) developed the concept of service quality in hospitals by using 15 indicators incorporated into three dimensions. The three dimensions and indicators are:

(1) infrastructure dimension with indicators: infrastructure, resource availability, patient safety and privacy, food and religious needs;

(2) procedural dimension with indicators: quality of outcomes, clinical procedures, administrative procedures, waiting time for services and prices; and

(3) interactional dimension with indicators: personalized attention, staff attitude, trustworthiness, information availability and continuity.

Madhura Prabhu and Iyer (2018) used the SERVQUAL model to assess the service quality of hospitals in India with the respondents as outpatients. Perception of the service quality for outpatients may be different from inpatients. Therefore, in this study, the authors used outpatient and inpatient respondents.

Research on the service quality in the health sector was also stated by Gupta and Rokade (2016), who suggested that there were various parameters or indicators to assess the quality of health services. Patient satisfaction is the most important parameter for assessing the quality of health services provided.

Service quality in Sharia insurance industry
Maiyaki and Ayuba (2015) state that Sharia insurance (Takaful) is an insurance practice established based on belief/faith to provide risk management products for consumers who have a strong belief that is not in accordance with conventional insurance services. The study found that awareness, perceptions and beliefs are significantly related to consumer attitudes on Takaful's services. Consumer trust and confidence should be prioritized and built to support Takaful insurance services. Awareness of Takaful services is substantial in shaping consumers' positive attitude toward Takaful services, and Takaful operator's attention is needed to build consumer awareness to understand its benefits, operations, practices and differences with conventional insurance. Similarly, consumer perceptions on Takaful's services and operators need to be built as they play an important role in encouraging consumers to use Takaful services.

Janjua and Akmal (2014) analyze the customer satisfaction with the services of conventional and Islamic insurance companies in Pakistan. A modified SERVQUAL model is used to measure service quality with variables of reliability, responsiveness, empathy, convenience and Sharia compliance. The results of service quality indicate a significant gap between the expectations and perceptions of the insurance industry as a whole. There is no significant difference between the expectation and overall perception of insurance companies, especially because conventional insurance companies need to focus on young people, private employees and low-income groups. Sharia insurance companies should try to increase Sharia compliance to attract entrepreneurs and higher-income groups.

Saaty and Ansari (2011) indicate that social and regulatory factors play an important role in consumer purchasing decisions. From this study, it can be concluded that the society is not fully aware of insurance activities in Saudi Arabia. They do not know about different types of insurance policies. The above findings indicate that the participants and non-participants of insurance consider the insurance as opposed to Sharia principles, although insurance in Saudi Arabia is operated based on Sharia compliance. Fast claim payments are the most important features for customers. The second feature is the Sharia compliance followed by a simple contract, easy procedures, insurance coverage for high risk and low premium. Other features, such as custom products, high discounts, easier installments, higher returns on investment and the meaning of getting out of the insurance, which is more flexible, are considered as unimportant. Therefore, one of the biggest challenges of insurance marketers is to educate the public that insurance in Saudi Arabia is operated in line with Sharia compliance. Thus, insurance companies need to emphasize on marketing strategy in the form of educative promotions to disseminate insurance, as well as motivate people to buy insurance. The promotion strategy should focus on educating the public that insurance in Saudi Arabia is operated based on Sharia compliance.

Research methodology

Development of the research instrument

The literature review in the previous section has highlighted the dimensions of service quality with various models. SERVQUAL models are widely used by researchers in the field of health services, but the PAKSERV and CARTER models are mostly used in the banking sector and rarely used in the field of health services and hospital services. This study combines the SERVQUAL, PAKSERV and CARTER models to measure the service quality in hospitals.

Hospital service may be different from patients who are holding and not holding social insurance cards. The social insurance agency assigned specifically by the Indonesian government to provide health-care guarantees for all Indonesian people is BPJS Health. This research is only limited to patients who hold BPJS Health card. BPJS Health is a new organization, so there are still not many studies related to BPJS Health.

There are not many studies related to the service quality in hospitals that partner with social insurance that has Sharia reviews. In this study, all indicators used were reviewed in Sharia. Therefore, the purpose of this study is to identify the important factors of BPJS Muslim participants for the service quality that they receive when they seek treatment using a BPJS Health card that has Sharia reviews.

The variables used in this study were 58 variables, obtained by developing the dimensions of the CARTER model (Ali, 2018; Fauzi and Suryani, 2018; Othman and Owen, 2001), the SERVQUAL model (Janjua and Akmal, 2014; Madhura Prabhu and Iyer, 2018; Parasuraman *et al.*, 1988), PARKSEV model (Karami *et al.*, 2016; Kashif *et al.*, 2015), the Sharia compliance used by Saaty and Ansari (2011) and the dimensions of research conducted by Kholis *et al.* (2018). Meanwhile, Swain and Kar (2017), from the 58 variables formed made question items in the research framework and also measured them by using a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree).

Selection of respondents

The data in this study are taken from five Islamic hospitals in Central Java, Indonesia. The selected hospitals are Islamic hospitals that organize health service cooperation with BPJS (Social Insurance Administration Organization) Health. Research respondents are 250 patients from the five selected hospitals, all of whom are participants of BPJS Health. According to the opinion of Malhotra (2004), it is said that the amount of sample is at least four or five times the number of variables used in the study. In this study, the number of variables set as many as 58, then a sample of 250 respondents is considered to have met the requirements.

Data collection procedure

The method used in the data collection by distributing questionnaires directly to the users of BPJS card in Islamic hospitals. This study took five hospitals in Central Java, Indonesia, as object. From each hospital, we have taken as many as 50 respondents, so the total collected was 250 respondents. Data were collected on the period of June–August 2017.

Statistical analysis technique

The analysis method used in this research is factor analysis assisted with SPSS version 23 program package. Factor analysis is one form of multivariate statistical analysis whose general purpose is to find one or several variables or concepts believed to be the source underlying a set of real variables (Malhotra, 2004).

The steps for using factor analysis according to Malhotra (2004) are as follows:

(1) *Formulate the problem*: His research is designed to identify the factors that are considered important by Muslim BPJS. Factor analysis is used to explore the definition, general understanding and measurement items that will be categorized into dimensions and variables. The variables used were 58, taken from previous researchers (Ali, 2018; Fauzi and Suryani, 2018; Othman and Owen, 2001; Janjua and Akmal, 2014; Madhura Prabhu and Iyer, 2018; Parasuraman *et al.*, 1988; Karami *et al.*, 2016; Kashif *et al.*, 2015; Saaty and Ansari, 2011; Kholis *et al.*, 2018; Swain and Kar, 2017) and later developed and modified by this study.

(2) Create a correlation matrix, provided that:
   • Barlett's sphericity test used to test the not correlated variables; and
   • size of the Kaiser–Meyer–Olkin (KMO) sampling adequacy that is greater than 0.5.

(3) *Establish factor analysis methods*: factor analysis in this study used the principal component analysis method.

(4) *Determine the number of factors*: The number of factors in this study is determined based on eigenvalues that are greater than 1, while factors that have values below are not included.

(5) *Rotating factors*: the rotation method used in this study is the varimax procedure.

(6) *Interpreting factors*: Factors formed are interpreted based on variables which have the highest loading factor on these factors. Furthermore, each factor is named based on the variables included.

Results and analysis

Demographics

Of the 250 samples used, the number of males is 44.4%, while the women are 55.6%. The employment of civil servants: 11.6%; private employment: 67.6%; and others: 20.8%. The age of respondents who are less than 25 years old is 13.2%, 26–40 years old is 52%, while over 40 years old is 34.8%. Education of the respondents; high school/equal: 30.8%, bachelor degree: 52%, master degree: 5.2%, doctoral degree: 1.6%, others: 10.4%. The respondents who went to Islamic Hospital using BPJS for only one time is 18.4%, two times: 26.8%, three times: 9.2% and more than three times as many as 45.6%.

Measurement model evaluation

In this study, 58 variables tested show that Bartlett's test of sphericity has a significance level of 0.00. Therefore, factor analysis may be used in this study. Furthermore, each variable is tested with the MSA, and there are no variables that have MSA under 0.5, and 58 variables are eligible for factor analysis.

Based on the eigenvalue which is higher than 1, there are ten factors that are formed with the cumulative variance of 76.961%. This means that a total of 58 factors will be able to explain the 76.961% of the variability to the 58 original variables. The ten factors are formed and then rotated by using the varimax method. The factors formed are interpreted based on variables which have the highest loading factor on these factors and have loading factor values above 0.5. Variables that have a loading factor of less than 0.5 are not included. From the 58 variables tested, it turns out that has a loading factor above 0.5 as many as 48 variables, while ten

variables have a loading factor below 0.5, so it is not included in the factor. The ten factors/
components formed and having a loading factor can be seen in Table 1.

Table 1 shows that, of the 58 variables used, only 44 variables are included into ten
factors, while the other 15 variables are not included into the factors or removed from
the model because the loading value is low (less than 0.5). Component/Factor 1 includes
nine variables, Factor 2 includes nine variables, Factor 3 includes four variables, Factor
4 includes six variables, Factor 5 includes four variables, Factor 6 includes four
variables, Factor 7 includes two variables, Factor 8 includes two variables, Factor 8
includes three variables, Factor 9 includes two variables and Factor 10 includes one
variable.

The ten rotation factors are then named according to the variables included, in
which the variables have been ranked based on the order of the largest loading factors.
The order of loading factors is from the largest to the lowest. The names of the factors
along with the eigenvalues and the percentage variance of each factor are summarized
in Table 2.

Based on Table 2, it can be concluded that there are 44 variables that are considered
important by BPJS Muslim participants for the services they receive when seeking
treatment using a BPJS Health card. The 44 variables are spread into ten factors. The
sequence of the ten factors that are considered important to BPJS participants and the
variables included therein can be explained as follows:

(1) Factor 1: SINCERITY and FORMALITY.

Sincerity is the first factor that is considered to be most important by BPJS Muslim
participants for the services they receive. The SINCERITY and FORMALITY factor has a
very large variance, which is 50.889%. The variables included in this first factor are:

- sincerity/sincerity of employees in serving BPJS participants;
- personnel clerks in serving BPJS participants;
- sincerity of employees in providing advice to BPJS participants;
- the way the employees serve patients based on the Islamic perspective;
- not to use dirty language when serving the BPJS participants;
- employee willingness to help the patients;
- full attention given by officers to BPJS participants;
- staff and medical/hospital personnel in providing services without distinguishing
  the social status of BPJS patients; and
- clarity of information provided by doctors for illness suffered by BPJS patients.

(2) Factor 2: INSURANCE SYSTEM

The insurance system occupies the second most important factor for the BPJS
Muslim participants. The variables included in this insurance system are:

- the amount of drugs cost borne by BPJS participants;
- the amount of hospitalization costs borne by BPJS participants;
- monthly contribution of BPJS;
- clarity of information on the rights and obligations of BPJS participants;
- types of medicines covered by BPJS;
- ease of registration process becoming the member of BPJS;

Variable items	Component									
	1	2	3	4	5	6	7	8	9	10
Sincerity/formality of the employees in serving BPJS participants	0.784	0.154	0.269	0.247	0.111	0.131	0.154	0.160	0.050	−0.054
Modesty of the employees in serving BPJS participants	0.759	0.244	0.252	0.173	0.235	0.121	0.094	0.125	0.130	0.114
Sincerity/formality of the employees in giving advice to BPJS participants	0.721	0.304	0.217	0.197	0.216	0.132	0.077	0.119	0.026	−0.014
The way the employees serve the patients in Islamic ways	0.709	0.165	0.226	0.265	0.046	0.104	0.098	0.114	0.199	0.270
Not to use dirty language when serving BPJS participants	0.690	0.074	0.138	0.047	0.232	0.222	0.099	0.078	0.136	0.435
The employees' willingness to help patients	0.676	0.284	0.179	0.294	0.133	0.262	0.167	−0.011	−0.163	−0.143
Full attention given by officers to BPJS participants	0.636	0.256	0.195	0.240	0.092	0.174	0.311	0.155	0.128	0.134
Staff and medical/hospital employees in providing services without distinguishing the social status of BPJS patients	0.541	0.051	0.528	0.376	0.003	0.005	0.050	0.130	0.192	0.109
Clarity of information given by doctors on the patients' illness	0.509	0.386	0.211	0.346	0.198	0.122	0.210	0.013	0.121	0.265
Neatness and attractive Islamic appearance of BPJS referral hospital employees	0.478	0.192	0.359	0.080	0.117	0.410	0.078	0.213	−0.277	0.100
Courtesy and friendliness of hospital employees in serving BPJS patients	0.474	0.076	0.451	0.260	0.380	0.000	0.168	0.067	0.225	−0.042
The cost of drugs borne by BPJS	0.133	0.852	0.143	0.202	0.188	0.011	0.107	0.106	−0.014	0.045
The cost of hospitalization borne by BPJS participants	0.099	0.831	0.088	0.287	0.132	0.167	0.131	0.102	−0.079	−0.014
The monthly cost of dues of BPJS	0.143	0.756	0.347	0.028	0.128	0.095	0.209	0.089	0.119	0.146
Clarity of information about rights and responsibilities of BPJS participants	0.378	0.626	0.188	0.212	0.054	0.186	0.155	0.152	0.223	−0.129
Types of drugs borne by BPJS	0.190	0.626	0.118	0.329	0.189	0.119	0.240	0.054	0.200	0.217
Ease in the registration process to be BPJS members	0.397	0.593	0.179	0.099	0.042	0.293	0.012	0.027	0.322	0.012

(continued)

Table 1.
Rotated component matrix[a]

Variable items		Component								
	1	2	3	4	5	6	7	8	9	10
The cost of outpatient borne by BPJS participants	0.344	*0.587*	0.209	0.128	0.069	−0.027	0.258	0.280	0.217	0.340
Freedom of choosing hospitals	0.169	*0.535*	−0.071	0.384	0.243	0.294	0.178	0.043	0.318	0.186
Quickness of BPJS cards-making process	0.456	*0.523*	0.019	0.078	0.117	0.294	0.187	0.111	0.128	−0.237
Ease of bureaucracy/procedure/sequence for treatment	0.472	*0.477*	0.172	0.334	0.226	0.162	0.179	0.082	0.101	−0.048
Ease of managing BPJS patient care costs	0.287	0.419	0.295	0.195	0.225	0.040	0.347	0.057	0.210	−0.108
Cleanness on the hospital building	0.346	0.203	*0.699*	0.133	0.160	0.123	0.027	0.218	0.049	0.085
Coziness of the hospital waiting room	0.277	0.232	*0.661*	0.149	0.115	0.305	0.045	0.245	0.123	0.100
Coziness of the hospital building	0.231	0.163	*0.661*	0.103	0.281	0.193	0.035	0.151	0.182	0.113
Hospitality of the hospital staffs and employees in serving the BPJS participants	0.547	0.076	*0.630*	0.237	−0.047	0.104	0.155	0.096	0.091	0.113
Ease of hospital employees when contacted by BPJS patients	0.434	0.195	0.457	0.419	−0.032	0.161	0.078	−0.069	0.220	0.068
Tabligh attitude in serving BPJS participants (wise and right on target)	0.292	0.243	0.216	*0.635*	0.126	0.357	0.067	0.075	0.011	0.032
Fast in handling the complaints of BPJS participants	0.383	0.372	0.186	*0.631*	0.178	0.084	0.163	0.086	0.072	0.083
Fast in serving the BPJS participants	0.383	0.195	0.298	*0.600*	0.200	0.215	0.206	0.164	0.142	0.125
Being responsible in serving BPJS participants (responsible for their job)	0.351	0.306	0.239	*0.596*	0.145	0.267	0.144	0.111	−0.164	0.112
Responsive in handling patients complaints	0.442	0.404	0.236	*0.540*	0.199	0.097	0.098	0.063	0.055	0.103
Fair attitude by the hospital in serving all patients	0.389	0.339	0.420	*0.512*	0.120	0.125	−0.106	0.146	0.178	0.022
Ease of rules for getting a room	0.453	0.405	−0.010	0.480	0.149	0.222	0.257	0.167	0.181	−0.146
Ease of service procedures at BPJS referral hospital	0.227	0.216	0.407	0.471	0.237	0.200	0.280	0.160	0.064	−0.134
Hospital attention to complaints of patients and families of BPJS participants	0.412	0.336	0.450	0.450	0.154	0.152	−0.032	0.006	0.165	0.016
Qoulan Sadidan attitude (speaking right and quality) in serving BPJS participants	0.391	0.268	0.328	0.438	0.160	0.125	0.107	0.042	0.068	0.428
Reputation of BPJS doctors in the hospitals	0.028	0.094	0.129	0.252	*0.756*	0.211	0.067	0.095	0.130	0.033

(*continued*)

Table 1.

Table 1.

Variable items	1	2	3	4	Component 5	6	7	8	9	10
Ability of BPJS doctors in giving service	0.222	0.384	0.180	0.063	0.699	0.020	0.074	0.043	0.094	0.078
Reputation of BPJS hospitals as places for treatment	0.207	0.182	0.054	-0.054	0.615	0.029	0.438	0.209	0.018	0.112
Extensive knowledge and experience of hospital teams	0.354	0.100	0.035	0.347	0.580	0.255	0.033	0.089	0.124	-0.239
Guarantee of trust and safety in servicing BPJS referral hospital	0.185	0.197	0.290	0.106	0.463	0.163	0.250	0.079	0.186	0.083
Affordability of the hospital location	0.195	0.064	0.253	0.170	0.150	0.717	0.134	0.149	-0.130	0.145
The availability of a fast and efficient transaction tool for BPJS participants in making payments	0.350	0.236	0.062	0.164	0.134	0.664	0.205	0.086	0.177	-0.082
Clarity of hospital service hours and doctor schedule for BPJS participants	0.149	0.244	0.218	0.272	0.238	0.657	0.059	-0.021	0.210	0.082
Availability of a complete and clear information facilities about BPJS	0.196	0.207	0.413	0.195	-0.074	0.507	0.277	0.134	0.065	0.167
Compliance and accuracy of payment claim/treatment for BPJS patients	0.213	0.319	0.060	0.111	0.144	0.134	0.784	0.138	0.077	0.015
The accuracy of payment claim/treatment for BPJS patients	0.248	0.327	0.020	0.124	0.117	0.159	0.748	0.140	0.106	0.032
Timeliness of doctors' schedule in examining BPJS patients	0.018	0.012	0.365	0.225	0.268	0.388	0.464	-0.033	0.198	-0.023
A discipline of BPJS service operational time	0.049	0.152	0.353	0.154	0.302	0.192	0.441	0.247	0.270	0.128
Conformity of BPJS implementation with Islamic principles	0.112	0.078	0.133	0.067	0.100	0.196	0.227	0.844	0.043	-0.072
Conformity of rules – rules made by BPJS with Islamic law	0.136	0.164	0.156	0.084	0.049	0.108	0.057	0.830	0.252	0.094
BPJS implements Islamic product service provisions	0.214	0.215	0.203	0.160	0.347	-0.181	0.045	0.592	-0.015	0.260
The ability of BPJS to reliably deliver promised services	0.173	0.240	0.210	0.082	0.250	0.061	0.199	0.214	0.690	0.063
Accuracy of BPJS appointments with the achievements	0.104	0.408	0.299	-0.029	0.270	-0.001	0.157	0.230	0.550	-0.093

(continued)

Variable items	Component									
	1	2	3	4	5	6	7	8	9	10
Availability of sophisticated medical equipment facilities for BPJS patients	0.297	0.119	0.249	0.357	0.168	0.188	0.211	0.159	0.495	0.199
Availability of mosque at BPJS referral hospitals	0.237	0.063	0.432	0.127	0.030	0.298	0.008	0.221	0.035	0.552

Notes: Extraction method: principal component analysis. Rotation method: varimax with Kaiser normalization. [a]Rotation converged in 12 iterations.

Table 1.

Factor	Eigenvalues	% variance	Factor name	Variable included	Loading factor
1	320.06	500.889	SINCERITY and FORMALITY	1. Sincerity/formality of the employees in serving BPJS participants	0.784
				2. Modesty of the employees in serving BPJS participants	0.759
				3. Sincerity/formality of the employees in giving advice to BPJS participants	0.721
				4. The way the employees serve the patients in Islamic ways	0.709
				5. Not to use dirty language when serving BPJS participants	0.690
				6. The employees' willingness to help patients	0.676
				7. Full attention given by officers to BPJS participants	0.636
				8. Staff and medical/hospital employees in providing services without 9. distinguishing the social status of BPJS patients	0.541
				10. Clarity of information given by doctors on the patient's illness	0.509
2	30.195	50.071	INSURANCE SYSTEM	11. The cost of drugs borne by BPJS participants	0.852
				12. The cost of hospitalization borne by BPJS participants	0.831
				13. The monthly cost of dues of BPJS	0.756
				14. Clarity of information about rights and responsibilities of BPJS participants	0.626
				15. Types of drugs borne by BPJS	0.626
				16. Ease in the registration process to be BPJS members	0.593
				17. The cost of outpatient borne by BPJS participants	0.587
				18. Freedom of choosing hospitals	0.535
				19. Quickness of BPJS cards-making process	0.523
3	20.251	30.573	Tangible and Empathy	20. Cleanness on the hospital building	0.699
				21. Coziness of the hospital waiting room	0.661
				22. Coziness of the hospital building	0.661
				23. Hospitality of the hospital staffs and employees in serving the BPJS participants	0.630
4	20.016	30.200	Responsiveness	24. *Tabligh* attitude in serving BPJS participants (wise and right on target)	0.635
				25. Fast in handling the complains of BPJS participants	0.631
				26. Fast in serving the BPJS participants	0.600
				27. Being responsible in serving BPJS participants (responsible for their job)	0.596
				28. Responsive in handling patients complaints	0.540
				29. Fair-attitude hospital in serving all patients	0.512
5	10.955	30.104	ASSURANCE	30. Reputation of BPJS doctors in the hospitals	0.756
				31. Ability of BPJS doctors in giving service	0.699
				32. Reputation of BPJS hospitals as places for treatment	0.615

(continued)

Factor	Eigenvalues	% variance	Factor name	Variable included	Loading factor
6	10.812	20.876	ACCESS TO THE LOCATION AND INFORMATION	33. Extensive knowledge and experience of hospital teams	0.580
				34. Affordability of the hospital location	0.717
				35. The availability of a fast and efficient transaction tool for BPJS participants in making payments	0.664
				36. Clarity of hospital service hours and doctor schedule for BPJS participants	0.657
				37. Availability of a complete and clear information facilities about BPJS	0.507
7	10.653	20.623	TREATMENT COST	38. Compliance and accuracy of payment claim/treatment for BPJS patients	0.784
				39. The accuracy of payment claim/treatment for BPJS patients	0.748
8	10.355	20.151	COMPLIANCE	40. Conformity of BPJS implementation with Islamic principles	0.844
				41. Conformity of rules – rules made by BPJS with Islamic law	0.830
				42. BPJS implements product service provision in an Islamic way	0.592
9	10.183	10.878	RELIABILITY	The ability of BPJS to reliably deliver promised services	0.690
				Accuracy of BPJS appointments with the achievements	0.550
10	10.005	10.596	Availability of mosque	Availability of mosque at BPJS referral hospitals	0.552
TOTAL	760.961				

Table 2.

- the amount of outpatient costs borne by BPJS participants;
- freedom to choose hospital for treatment; and
- the speed of BPJS card making process.

(3) Factor 3: TANGIBLE and EMPATHY.

Tangible and empathy become the third important factor of BPJS Muslim participants for services received. The tangible and empathy factors have a variance of 3.573%. The variables included in this third factor are:

- cleanness of BPJS referral hospital building;
- cosines of the waiting room at BPJS referral hospital;
- convenience of BPJS referral hospital building; and
- hospitality of the hospital staff and employees in providing services to BPJS participants.

(4) Factor 4: RESPONSIVENESS

Responsiveness (responsiveness) is a response of the employees in helping consumers and providing service quickly and responsively. In Islam, people must always keep commitments along with promotions made by the company. If the company cannot keep the commitments in providing good service, then the risk that will happen is being abandoned by the customer. Responsiveness ranks fourth as factor that concerns BPJS participants for the service they received. This fourth factor includes:

- *tabligh* in serving BPJS participants (wise and right on target);
- fast in handling BPJS patients complaints;
- fast in providing services to BPJS patients;
- responsible in serving the BPJS participants (responsible for doing the task);
- respond in handling BPJS patient complaints; and
- fair-attitude hospital in serving all patients.

(5) Factor 5: ASSURANCE

Assurance becomes the fifth factor of BPJS Muslim participants for services received. Factor assurance has a variance of 3.104%. The variables included in this fifth factor are:

- reputation of doctors at BPJS hospital;
- the ability of BPJS doctors in providing services;
- reputation of BPJS referral hospital as a place of treatment; and
- extensive knowledge and experience of the hospital team.

(6) Factor 6: ACCESS TO LOCATION AND INFORMATION

Access to location and information becomes the sixth important factor of BPJS Muslim participants for services received. The factor of access for location and information has a variance of 2.876%. The variables included in this sixth factor are:

- affordability of the hospital location;
- the availability of a fast and efficient transaction tool for BPJS participants in making payments;
- clarity of hospital service hours and doctors schedule for BPJS participants; and
- availability of a complete and clear information facilities about BPJS.

(7) Factor 7: TREATMENT COST

The seventh important factor of BPJS Muslim participants for the services received is treatment cost. This factor has a variance of 2.623%. The variables included in this seventh factor are:
- compliance and accuracy of payment claim/cost of BPJS patient treatment; and
- the accuracy of payment claims/cost of BPJS patient treatment.

(8) Factor 8: COMPLIANCE

Compliance is in line with rules or laws that have been established by God. Compliance factor in this research is ranked eighth of the factors considered to be important by the BPJS Muslim participants for the services they received. The variables included in this factor are:
- conformity of BPJS implementation with Islamic principles;
- conformity of rules made by BPJS based on Islamic law; and
- BPJS implements product service provision in an Islamic way.

(9) Factor 9: RELIABILITY

Reliability is the ability of the company to provide services accurately, timely and reliable. The reliability factor in this study becomes the ninth factor which is considered important by the Muslim BPJS participants for the services they received. Reliability factors include:
- the ability of BPJS to deliver promised services reliably; and
- accuracy of BPJS appointments with achievements.

(10) Factor 10: Availability Of Mosque
The availability of the mosque is an important factor of BPJS Muslim participants for services received. This factor has a variance of 1.596%. Only one indicator is included in this factor, namely, availability of the mosque at BPJS referral hospitals.

Discussion

This study uses 58 variables to identify the factors that are considered important by Muslim participants BPJS Health for service they received. Of the 58 variables identified, ten factors are considered important by BPJS Muslim participants. The ten factors and the dominant variables are as follows:

(1) Sincerity and formality factors with dominant variables "Sincerity of employees in serving BPJS participants".

The sincerity of hospital employees in serving patients of BPJS cardholder are the main factors of concern and are considered most important when patients seek treatment at the hospital. Hospital output is a service, and service becomes very important. The standard of service that must be provided by the hospital, as a BPJS partner, to the patient is referring to the Prophet's hadith narrated by Anas bin Malik RA: "Not perfect one's faith until he loves his brother as he loves himself" (HR. Bukhori). This hadith means that we should treat our siblings as we treat our self. We definitely want to be treated and served well, sincerely, so we have to apply that desire when serving others. This makes sincerity becomes the most dominant indicator of this first factor.

(2) Insurance system with the dominant variable "The cost of drugs borne by BPJS participants".

Patients with BPJS card when going to the hospital expect that all costs while treatment is fully borne by the BPJS so that patients do not need to spend money. This is because every month BPJS participants are required to pay contributions in accordance with the class chosen by BPJS participants. In fact, patients often have to buy their own medication because the drug is not available at the hospital or the drug is not borne by the BPJS. Therefore, it makes "the cost of drugs borne by BPJS participants" becomes the dominant variable in the insurance system factor.

(3) Tangible and empathy with dominant variable "Cleanness of BPJS referral hospital building".

We often hear the slogan such as "cleanliness is part of faith". This slogan is actually the word of the Prophet, who ordered us to always maintain cleanliness. Islam teaches about cleanliness, both cleanliness of the heart, body, and environment. Islam considers that maintaining cleanliness is an important problem that must be considered and implemented in daily life. Islamic hospitals, which are partnering with BPJS, must practice the teachings on grief and holiness so that harmony between humans and their environment, between humans and humans and between humans and nature will be maintained. Therefore, the important thing is the teaching of cleanliness in Islam, so the prophet says "Islam is a clean religion, so keep clean. Indeed, someone does not enter heaven except those who are clean" (HR Baihaqi). This makes the cleanliness of the building a variable which is dominant in this third factor.

(4) Responsiveness with dominant variable "tabligh in serving BPJS participants".

Tabligh is related to the delivery or communication from the hospital as a BPJS partner to patients. *Tabligh* according to the Islamic perspective is:
- *Qaulan sadidan*: true and honest words (QS. Al Baqarah: 83);
- *Qaulan baligha*: right on target, communicative (QS. An- Nisa: 63, QS Ibrahim: 4);
- *Qaulan Layyina*: gentle (QS. Thoha: 44);
- *Qaulan Karima*: a noble word (Surat al-Isra: 23); and
- *Qaulan Ma'rifa*: good words (QS. An- Nissa: 5 and 8, QS AL Baqarah: 235-236).

If *Tabligh* is owned by a BPJS referral hospital, communication in various matters between the hospital and BPJS patients becomes effective. This is what causes the importance of *tabligh* for BPJS cardholder patients; thus, *tabligh* becomes the dominant variable in this fourth factor.

(5) Assurance with dominant variable "Reputation of doctors at BPJS Hospitals".

Patients go to the hospital, of course, they hope to recover from the disease. The patient's recovery is of course from God, but doctor becomes a mediator. The competence of doctors becomes important and consideration for patients in choosing hospitals. In addition, the important things that must be had by doctors when treating patients are respect, courtesy and gentleness. This will increase the positive perception and value for the patient toward the hospital where the patient is treated. Good or bad service will determine the success of the hospital. By providing good service, patients will get security guarantee. In this regard, Allah has said in Qs. Ali Imran 159: "So by mercy from Allah, [O Muhammad], you were lenient

with them. And if you had been rude [in speech] and harsh in heart, they would have disbanded from about you. So, pardon them and ask forgiveness for them and consult them in the matter. And when you have decided, then rely upon Allah. Indeed, Allah loves those who rely [upon Him]".

(6) Access to location and information with dominant variable "Affordability of the location of the Hospital".

Affordability means the closeness and ease of reaching the hospital which becomes a reference for BPJS participants. Patients consider this because people who suffer from pain want immediate treatment and care so that the proximity and ease of reaching the hospital become a major concern. The proximity and ease of reaching the hospital become also a concern for inpatients. This is because inpatients need families who take turns waiting so that closeness to the place of residence becomes also a factor to be considered.

(7) Treatment costs with dominant variable "Compliance and accuracy of Total payment claims/BPJS patient treatment costs".

The accuracy of the claim cost of treatment is a measure for patients to assess hospitals that partner with BPJS. The more accurate the patient will assess, the more mandatory will be the health management in hospitals that partner with BPJS. Errors in determining costs can cause various consequences. Setting the cost of claims that violate the provisions can lead to patient dissatisfaction and can even lead to reactions that can drop the reputation of the hospital.

(8) Compliance with dominant variable "BPJS Compliance with Islamic principles".

The hospital used as the object of this research is an Islamic hospital that partners with BPJS Health. BPJS is a health insurance institution formed by the Indonesian government. The hospital partnering with BPJS means that the hospital runs the rules of the BPJS Health in serving BPJS participants. Patients of Islamic hospitals are mainly Muslim. As an Islamic hospital, in its operation, it is certainly based on Islamic Sharia standards, especially in providing services to patients. Although partnering with BPJS Health, the services of the medical and non-medical departments must reflect Islamic values. The more appropriate the service quality of the hospital that partners with BPJS and also apply the Islamic provisions, the more fulfilled the needs and desires of the patient and, ultimately, more satisfied. This is what causes this variable to be important for Muslim patients when seeking treatment at hospitals that partner with BPJS.

(9) Reliability with the dominant variable "The ability of BPJS to provide promised services reliably".

As a BPJS participant, when seeking treatment at a hospital, they certainly want services that are in accordance with the promises given when registering as BPJS patients. If this is carried out properly, the patient feels very valued and increasingly believes in the implementation of BPJS. Carrying out promises that have been delivered is a trustworthy attitude. Guidelines that can be used in running activities (*mu'amalah*), as stated in QS Al-Ahzab; 21, which means: "There has certainly been for you in the Messenger of Allah an excellent pattern for anyone whose hope is in Allah and the Last Day and [who] remembers Allah often". The messenger of Allah has practiced and ordered that every Muslim always keep the trust from Him.

(10) Availability of mosque or place for prayer at BPJS referral hospitals.

People who get sick will get closer to God by praying and worshiping more. For patients who are hospitalized, the patient's family will need a place to pray and worship solemnly, namely, in the mosque. The existence of a mosque is very necessary for patients and families of patients who are seeking treatment at the hospital. Therefore, this variable becomes a factor that patients consider when seeking treatment at the hospital.

The above ten factors, can be concluded as a new dimension to measure the quality of service based on Sharia (Islam). The dimensions of the diagram are almost identical to the dimensions in the SERVQUAL, PAKSERV and CARTER models, but this study has added relevant indicators in the Islamic perspective. What is new in this dimension is the emergence of the dimension of location access and information, as well as the dimensions of the availability of praying facilities or prayer facilities. The first factor that is considered important for the Muslim BPJS participants for the services they receive is SINCERITY and FORMALITY with a variance of 50.889%. This means that the SINCERITY and FORMALITY factors are considered very important for the Muslim community in receiving service quality.

Conclusion

From the description above, it can be concluded that there are ten factors that are considered important by BPJS Muslim participants for the services they receive when seeking treatment using a BPJS Health card. These ten factors are sincerity and formality, insurance system, tangible and empathy, responsiveness, assurance, access to location and information, treatment costs, compliance, reliability and availability of mosque. From each of these factors, the dominant/most important variables are sincerity of employees in serving BPJS participants, the amount of drugs cost borne by BPJS participants, cleanness on the hospital building, *tabligh* attitude in serving BPJS participants (wise and right on target), reputation of BPJS doctors in the hospitals, affordability of the hospital location, compliance and accuracy of payment claim/treatment for BPJS patients, BPJS compliance with Islamic principles, the ability of BPJS to reliably deliver promised services and availability of mosque at BPJS referral hospitals.

Managerial implication

The results of the study show that there are ten factors that are considered important by BPJS Muslim participants for services received when taking medication using a BPJS card. Therefore, BPJS managers and leaders of hospitals in partnership with BPJS need to pay attention to this matter and then make improvements so that the ten factors can improve the quality of their services and BPJS participants are satisfied with the services they receive.

Hospitality employees' sincerity in serving BPJS cardholder patients are the main factors of concern and are considered most important when patients seek treatment at the hospital. Therefore, the hospital needs to provide understanding to its employees to serve patients sincerely.

The new variable that appears in this study is the existence of a place of worship (mosque) which turned out to be a consideration of Muslim BPJS participants in choosing a place for treatment. These results need to be taken into consideration for managers of hospitals to provide a representative place of worship so that patients and their families who will worship and pray feel solemn and comfortable.

Limitation and future research

This study only takes samples of Muslim BPJS participants in Central Java, Indonesia, so the possibility of the results is different if applied in other parts of Indonesia. It would be

more meaningful if the results of this study were also carried out on participants of the BPJS Muslim with a sample that could represent Indonesia as a whole.

This study has found ten factors that are considered important by the BPJS Muslim participants for services they received from BPJS Health. Based on the results of this study, the future research needs to evaluate BPJS implementation of services provided whether it is in accordance with the Sharia principles or not. It is hoped that this evaluation will formulate a Sharia-based BPJS development framework.

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Further reading

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