



---

## Validity and reliability Test of Developed Servqual Instrument for Outpatients Pharmacy Services at Pratama Annisa Primary Healthcare Semarang

---

Gilang Rizki Al Farizi<sup>1\*</sup>, Fransisca Gloria<sup>1</sup>, Vita Zulfatul Maula<sup>1</sup>

1) Pharmacy Study Program, STIKES Telogorejo Semarang, Indonesia

\*Correspondence to: [gilangralfarizi@gmail.com](mailto:gilangralfarizi@gmail.com)

**Abstract:** The quality of pharmaceutical care services has an important role and main indicator for valuation the National Health Insurance (JKN). Patient satisfaction is the goal of pharmaceutical care services that serve to improve the quality of life of patients. Servqual is a method that has often been used to measure service satisfaction. The development of servqual instruments could be deployed to the needs of services in the pharmaceutical sector to maintain service quality. This study was conducted to measure the validity and reliability test of the Indonesian version of the developed servqual instrument for outpatient pharmacy services at Pratama Annisa primary healthcare Semarang. This study was an observational method through an analytic survey with a cross-sectional approach. The number of samples was 40 outpatients using the purposive sampling technique. The validity test was performed using the Aiken V index ( $\geq 0,4$ ) and construct study. Reliability test used the internal consistency technique (Cronbach alpha coefficient  $\geq 0,6$ ). The result of the validity test showed that the correlation value of each item was  $> 0,4$  and the reliability test result showed that the Cronbach alpha coefficient was 0.932. The Developed of servqual instrument is valid and reliable for measuring the customer satisfaction

**Keywords:** Outpatient, Pharmaceutical Care Services, Reliability, Servqual, Validity

---

### INTRODUCTION

The National Health Insurance is part of the social security system or better known as the SJSN which is implemented with mandatory social health insurance procedures to provide comprehensive public health insurance so that people can live healthy, productive and prosperous lives. prosperous (Abidin, 2016). Based on the latest data published by the Social Security Administering Body (2018), the number of hospitals in Indonesia that cooperate as health care facilities for BPJS participants is 2268 units and the number of BPJS participants is 195,170,283 million people. The increase in the number of participants will certainly be directly proportional to the improvement in service quality, where one indicator of the success of BPJS is satisfaction for service users

Satisfaction is the level of one's feelings after comparing the performance or perceived results of service received and felt as expected (Irine, 2009). Service Quality (Servqual) is a method of measuring service quality that compares customer expectations with service performance (Parasuraman et al, 1998).

Pharmaceutical care services has an important role in the National Health Insurance (JKN), it's because pharmaceutical care services are required to provide quality services, especially medicines to BPJS participants (Krisnadewi, 2014). The development of servqual instruments could be deployed to the needs of services in the pharmaceutical sector to maintain service quality. This study was conducted to measure the validity and reliability test of the Indonesian version of the developed servqual instrument for outpatient pharmacy services at Pratama Annisa primary healthcare Semarang.



## METHODS

This study was conducted to measure the validity and reliability test of the Indonesian version of the developed servqual instrument for outpatient pharmacy services at Pratama Annisa primary healthcare Semarang. This study was an observational method through an analytic survey with a cross-sectional approach. The number of samples was 40 outpatients using the purposive sampling technique. The validity test was performed using the Aiken V index ( $\geq 0,4$ ) and construct study. Reliability test used the internal consistency technique (Cronbach alpha coefficient  $\geq 0,6$ ).

## RESULT AND DISCUSSION

The characteristics of the respondents in this study included the patient's age, gender, type of BPJS membership, education and occupation. All data were analyzed descriptively for their characteristics.

### Characteristics of Respondents Based on Age

Respondent data by age can be seen in the following table:

**Table 1. Characteristics of Respondents Based on Age**

No	Age (Year)	Total (Person)	Percentage (%)
1	17 – 25	6	15
2	26 – 35	10	25
3	36 – 45	12	30
4	46 – 55	10	25
5	56 - 65	2	5
	Total	40	100

Based on **Table 1** above, it can be seen that the distribution of the age group of 26 - 55 years is quite a large age group compared to the total respondents, while the age group of 56 - 65 years has a small percentage. According to Simono (2000), adults have broader and more responsible insights and knowledge, making it easier to accept the various information they receive. According to R Raising (2019) in his research, he said that adulthood is an age that has a critical mind so they have the desire to express their opinions and hopes.

### Characteristics of Respondents Based on Gender

Respondent data by gender can be seen in the following table:

**Table 2 Characteristics of Respondents Based on Gender**

No	Gender	Total (Person)	Percentage (%)
1	Male	22	55
2	Female	18	45
	Total	40	100

Based on the **Table 2** above, it can be seen that the majority of respondents are female respondents, namely 22 people or 55%, while male respondents are 18 people or 45%. Based on the research of Rahmayanti and S Supriyanto (2011) he stated that in general women are more susceptible to disease and faster to get health assistance if they have health problems compared to men.

### Characteristics of Respondents Based On BPJS Categories Membership

Respondent data by BPJS Participants Categorized can be seen in the following table:

**Table 3. Characteristics of Respondents Based On BPJS Participants Categorized**



No	Categories of BPJS Membership	Total (Person)	Percentage (%)
1	PBI	24	60
2	Non-PBI	16	40
	Total	40	100

\*PBI = Penerima Bantuan Iuran; Non-PBI: Non Penerima Bantuan Iuran

Based on **Table 3** above, respondents are distributed into different BPJS membership categories. BPJS PBI numbered 24 people or 60% while BPJS PBI participants amounted to 24 people or 40%. According to Ratnasari's research (2019) in his research, it was found that 53.15% non-PBI BPJS participants and 47.85% BPJS PBI participants the difference between the two types of participation can be seen because of the difference in services provided to PBI and PBI. Non-PBI patients.

### Characteristics of Respondents Based on Level of Education

Respondent data by level of education can be seen in the following table:

**Table 4. Characteristics of Respondents Based On Level of Education**

No	Education	Total (Person)	Percentage (%)
1	Primary	5	12,5
2	Junior	7	17,5
3	Senior	18	45
4	Diploma	4	10
5	Bachelor	6	15
	Total	40	100

Based on **Table 4** above, it can be seen that the respondents with the highest education level were Senior High School level, namely 44 people or 44% and the lowest education level was primary level, namely 3 people or 3%. The level of education in Junior High School is 5%, Diploma 22% and Bachelor's education level 26%. The same thing was also found in the research of Achmad Asnawi (2009) in his research that the highest education at the primary healthcare was the high school level, namely 74.5%. This is in line with W Ahmad's research (2020) that families with higher education levels will be more aware of early symptoms and early treatment so that families are more efficient in utilizing treatment. This is in accordance with the population data of the community in Ngaliyan District, namely in Beringin District the highest education level is Senior High School, which is 2.164 people.

### Characteristics of Respondents Based on Occupation Status

Data responden berdasarkan pekerjaan dapat dilihat pada tabel berikut ini:

**Table 5. Karakteristik Responden Berdasarkan Pekerjaan**

No	Occupation Status	Total (Person)	Percentage (%)
1	employee	30	75
2	Unemployment	10	25
	Jumlah	40	100

Based on **Table 5** above, it can be seen that the highest job status is working as many as 30 peoples (75%) this can certainly be seen from the demographics of the Ngaliyan district which is located in the west of the city of Semarang and this area has a strategic position because it is a link between the cities of Semarang and Kendal. Ngaliyan district has facilities such as traditional markets, and schools and there are quite a number of industrial areas so that residents in the surrounding area can easily find work. The highest cases of visitors at the Annisa Pratama Clinic are workers, most likely visitors to this Annisa Pratama Clinic are sick because of work compared to those who don't work.

### Validity and Reliability Test Analysis

Questionnaire statements can be used to reveal something that the questionnaire will measure. According to (Gayatri, 2020) if the measuring instrument already has construct validity, it means that all



items (questions or statements) contained in the measuring instrument measure the concept you want to measure. The construct validity test is said to be valid if the value of each statement item is > 0.4. The assessment of pharmaceutical services using the servqual method consists of several aspects, namely tangible, reliability, assurance, responsiveness, and empathy in accordance with the competency standards of a pharmacist. The results of the construct study are in the following table

**Table 6. Pharmaceutical Services Assessed In Research Instruments**

Competency Standards	Aspect	Attribute Statement	Validation			
Pelayanan Informasi Obat (PIO) dan Konseling	Tangible	Ruang tunggu yang tersedia terasa nyaman untuk kegiatan penyuluhan	3	3	3	
		Pemberian informasi obat dilakukan secara rutin oleh apoteker	3	3	3	
	Realibility	Pelayanan informasi obat dan konseling sepenuhnya dilakukan oleh seorang apoteker	4	4	4	
		Petugas farmasi/apoteker mampu menjawab pertanyaan pasien dengan baik dengan menggunakan contoh nyata	4	4	4	
	Assurance	Petugas farmasi menanyakan kembali mengenai pemahaman pasien tentang informasi obat yang telah disampaikan oleh apoteker	3	3	3	
		Kegiatan PIO memberikan wawasan pasien terkait penggunaan obat atau alat kesehatan.	3	3	3	
	Responsiveness	Petugas farmasi berinisiatif untuk memberikan informasi sebelum pasien bertanya	3	3	3	
		Petugas farmasi tanggap dan sigap dalam melayani keluhan pasien.	3	3	3	
	Empathy	Petugas farmasi memberikan layanan konseling tanpa melihat latar belakang pasien..	4	4	4	
		Petugas farmasi bersedia memberikan layanan kepasien diluar jam kerja (home care)	4	4	4	
	Pengkajian dan Pelayanan Resep	Tangible	Pasien mendapatkan jenis dan jumlah obat sesuai yang ada didalam resep	3	3	3
			Ketersediaan dan kelengkapan obat yang ada diapotek	3	3	3
Realibility		Pasien tidak perlu menunggu lama untuk menerima obat setelah resep diserahkan	3	3	3	
		kemudahan proses pengambilan obat.	3	3	3	
Assurance		Petugas farmasi siap siaga di instalasi farmasi saat jam kerja	3	3	3	
		Petugas farmasi selalu mencocokkan kembali obat yang diberikan kepasien sesuai dengan resep.	3	3	3	
Responsiveness		Petugas farmasi cepat tanggap saat ada resep yang masuk	3	3	3	
		Petugas farmasi tanggap dalam mengkaji resep	3	3	3	
Empathy		Petugas farmasi memberi perhatian terhadap keadaan pasien saat pengambilan obat.	3	3	3	
		Petugas farmasi menyampaikan penjelasan mengenai aturan pemakaian obat hingga pasien memahami.	3	3	3	
Dispensing Obat		Tangible	Pengemasan obat dilakukan dengan baik	3	3	3
			Petugas farmasi menuliskan etiket dengan jelas	4	4	4
	Realibility	Petugas farmasi melakukan penyiapan obat dengan baik	4	4	4	
		Ketelitian petugas farmasi dalam melakukan penyiapan obat	3	3	3	
	Assurance	Kesesuaian petugas farmasi dalam memberikan obat ke pasien	3	3	3	
		Petugas farmasi memastikan kelayakan obat yang akan diberikan ke pasien	4	4	4	
	Responsiveness	Petugas farmasi menerima dan memvalidasi resep dari dokter dengan tanggap	4	4	4	
		Petugas farmasi mengingatkan identitas kepasien saat memberikan obat supaya tidk terjadi kesalahan	4	4	4	
	Empathy	Petugas farmasi atau apoteker mendistribusikan obat kepasien secara langsung	4	4	4	
		Petugas farmasi memberikan layanan kepasien dengan ramah	4	4	4	

\*4=Relevant, 3=Quite Relevant, 2=Less Relevan, 1=Irrelevant



**Table 7. Validity Test Results on Each Attribute Statement**

Statement Items (Code)	Correlation	Validity	Conclusion
P101	0,75	0,4	Valid
P102	0,63	0,4	Valid
P103	0,70	0,4	Valid
P104	0,70	0,4	Valid
P105	0,63	0,4	Valid
P106	0,75	0,4	Valid
P107	0,75	0,4	Valid
P108	0,75	0,4	Valid
P109	0,60	0,4	Valid
P110	0,63	0,4	Valid
P111	0,65	0,4	Valid
P112	0,75	0,4	Valid
P113	0,53	0,4	Valid
P114	0,55	0,4	Valid
P115	0,55	0,4	Valid
P116	0,55	0,4	Valid
P117	0,55	0,4	Valid
P118	0,58	0,4	Valid
P119	0,58	0,4	Valid
P120	0,55	0,4	Valid
P121	0,55	0,4	Valid
P122	0,75	0,4	Valid
P123	0,78	0,4	Valid
P124	0,60	0,4	Valid
P125	0,60	0,4	Valid
P126	0,75	0,4	Valid
P127	0,70	0,4	Valid
P128	0,73	0,4	Valid
P129	0,78	0,4	Valid
P130	0,68	0,4	Valid

Based on Table 7 above, it can be explained that the statement of the level of satisfaction in each statement item obtained results from 0.53 to 0.78, which results show higher results than 0.4, which means that each question item in each statement item is declared valid. Therefore, it shows that the 30 statement items on the modified servqual instrument have a correlation value of > 0.4 with a 95% confidence level (0.05) as the limit value of a research instrument can be accepted and it can be concluded that the instrument can be used..

Reliability test is used to measure a questionnaire which is an indicator of a variable. Reliability indicates the extent to which the results of the questionnaire can be trusted. The questionnaire is said to be reliable or reliable if the answers to the questions are consistent or stable. In this study, the reliability of the questionnaire was tested using the Cronbach Alpha formula which is a way to test the reliability of a questionnaire that provides answer choices in the form of choices consisting of more than two choices. each aspect of pharmacy services at the clinic which includes Drug Information Services and counseling, assessment and prescription services, and drug dispensing. The results are said to be reliable or reliable if the alpha coefficient is greater than 0.60 (Ghozali, 2020). Based on the reliability testing of the questionnaire, it can be seen in the table below:

**Table 8. Reliability Test Results on Each Attribute Statement**

Cronbach's Alpha	N of Items
.932	30



Based on Table 8 above, it can be explained that the 10 questions on the level of satisfaction with drug dispensing satisfaction obtained a Cronbach's Alpha value of 0.932, the value is greater than 0.60 with a 95% confidence level (0.05) which means that all statements on drug dispensing satisfaction are declared reliable and can be used

## CONCLUSION

Results Based on the research and discussion of the validity and reliability tests of the instrument that can be used to access the application, it is valid to measure the satisfaction of pharmaceutical services at the Annisa Pratama Clinic Semarang with the validity and reliability values of each being 0.53 – 0.78 and Cronbach's Alpha coefficient of 0.932.

## AUTHOR CONTRIBUTION

GRA dan FG cried out study concept, design and drafting manuscript. V provide validity and reliability test to responden and participated in statistical analysis with GRA. All authors read and approve the final manuscript.

## CONFLIC OF INTEREST

The authors state that the research was conducted without any commercial or financial relationship that could be construed as a potential conflict of interest

## ACKNOWLEDGEMENT

The author are grateful to all of laboratory assistance and my student in pharmacy study program for providing the materials in this research. Special thanks to my research team, mrs apt. Fransisca Gloria, M.Farm and Vita for the support to finalize this project

## REFERENCES

- Abidin, 2016. Pengaruh Kualitas Pelayanan BPJS Kesehatan terhadap kepuasan pasien di Puskesmas Cempae Kota Parepare. *Jurnal MKMI*. Vol 12. No.2
- Asnawi Achmad, 2009, Gambaran Persepsi Pasien Terhadap Pelayanan Kesehatan di Puskesmas Sukmajaya Kota Depok, Universitas Indonesia, Fakultas Kesehatan Masyarakat, Depok
- Badan Penyelenggara Jaminan Sosial (BPJS)., 2014. *Buku Pegangan Sosialisasi Jaminan Kesehatan Nasional (JKN) dalam Sistem Jaminan Sosial Nasional*. Jakarta: Badan Penyelenggara Jaminan Sosial BPJS
- Badan Penyelenggara Jaminan Sosial (BPJS)., 2018 Laporan Pengelolaan Program dan Laporan Keuangan Jaminan Sosial Kesehatan Tahun 2018. Jakarta; 2018
- Gayatri Citraningtyas dkk. 2020. Analisis Tingkat Kepuasan Pasien Rawat Inap Terhadap Pelayanan Kefarmasian Di Instalasi Farmasi RS X Tahunan. *Jurnal Manajemen dan Pelayanan Farmasi*. Vol. 10 No. 1
- Gozali et.al., 2020. Analisis Tingkat Kepuasan Pasien Rawat Inap Terhadap Pelayanan Kefarmasian Di Instalasi Farmasi RS X Tahunan. *Jurnal Manajemen dan Pelayanan Farmasi*. Vol. 10 No. 1
- Ima Ratnasari & Nissa Syifa Puspani., 2019. Analisis Tingkat Kepuasan Pasien Di Klinik Pratama Abc Kota Bandung Menggunakan Metode *Importance Performance Analysis*. *Seminar dan Konferensi Nasional IDEC* ISSN: 2579-6429



- Irine., 2009. Gambaran Tingkat Kepuasan Ibu Bersalin Tentang Pelayanan Persalinan Program Jampersal di BPM Yulia Kota Semarang. *Jurnal Online Universitas Muhammadiyah Semarang*
- Krisnadewi A.K. and Subagio P.B., 2014, Evaluasi Standar Pelayanan Minimal Instalasi Farmasi RSUD Waluyo Jati Kraksaan Sebelum dan Sesudah Badan Penyelenggara Jaminan Sosial (BPJS) Kesehatan. *e-Jurnal Pustaka Kesehatan*, 2 (2), 192–198.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., 1998. SERVQUAL: a multiple item scale for Measuring consumer perceptions of service quality, *Journal of Retailing*, vol. 64 No, 1, pp. 12-40
- R Raising dan S Erikania, 2019. Analisis Kepuasan Pasien Terhadap Pelayanan Kefarmasian Di Rumah Sakit dan Apotek. *Jurnal Mandala Pharmacon Indonesia*. Vol. 5 No.1
- S. Supriyanto & Ernawati., 2011. Pemasaran Industri Jasa Kesehatan, Yogyakarta
- Simono., 2000. *Faktor-Faktor yang Berhubungan dengan Pemanfaatan Pelayanan Kesehatan Pada Peserta BPJS Kesehatan di Puskesmas Paniki Bawah Kecamatan Mapanget Kota Manado*. 2015;88-100
- Sofi Nurmay dan Siti Nurfitriani, 2014. Analisa Tingkat Kepuasan Pasien Bpjs Terhadap Pelayanan Kefarmasian Unit Rawat Jalan Di Ifrs Serang. *Farmagazine*. Vol I. No. 1
- Wildan Ahmad M. 2020. *Tingkat Kepuasan Pasien Terhadap Pelayanan Kefarmasian Di Instalasi Farmasi Puskesmas Sisir Kota Batu*. Fakultas Kedokteran UIN Maulana Malik Ibrahim. Malang

