

## The Patient Satisfaction with Pharmacist Services Questionnaire (PSPSQ 2.0): translation and validation study of the Urdu version

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The study aimed to examine the psychometric properties of the Urdu version of Patient Satisfaction with Pharmacist Services Questionnaire (PSPSQ 2.0). We applied the forward-backward procedure to translate the PSPSQ 2.0 in the Urdu language. The test-retest reliability was assessed through Cronbach's alpha reliability analysis. The validity of the translated PSPSQ 2.0 was constructed by using Confirmatory Factor Analysis (CFA) through principal axis factoring extraction and Oblique rotation with Kaiser Normalization onto 2 predetermined factors. The Quality of Care (QOC) construct exhibited Cronbach's alpha values of 0.900 (Test) and  $\alpha = 0.871$  (Retest) at two-time points. The Interpersonal Relationship (IPR) Construct had alpha values of 0.845 (Test) and  $\alpha = 0.819$  (Retest). The Kaiser-Meyer-Olkin measure of sampling adequacy for the factor analysis was 0.899. Barlett's Test of Sphericity was significant (Chi-square = 1192.72;  $p < 0.05$ ) revealing relationships of the data and suitability of CFA. Two factors explaining the total variance of 40% were extracted whereby loading values were acceptable ( $> 0.50$ ) for all items of the translated version of PSPSQ 2.0. Results of this study conclude that the translated version of PSPSQ 2.0 is a valid instrument in regions where Urdu is a prime language of communication.

**Keywords:** Patient satisfaction. Pharmacist services. Translation and validation study. Urdu.

### INTRODUCTION

A well-established characteristic of measuring quality and sustainability of healthcare systems include assessment of patient satisfaction with healthcare services (Moon *et al.*, 2016; Panvelkar *et al.*, 2009). Even though much has been reported on patient satisfaction, there is no established definition of patient satisfaction and methods assessing patient satisfaction are scarce in the literature (Bleich *et al.*, 2009; Crow *et al.*, 2002; Sofaer, Firminger, 2005). Within this context, where one school of thought associates patient satisfaction with the eminence and nature of services offered (Jackson *et al.*, 2001; Thi *et al.*, 2002), the other correlates

satisfaction with the overall progress of the healthcare system (Roter, 1989). Nevertheless, the significance of both viewpoints is established. A satisfied patient is more likely to be acquiescent to the healthcare services and cooperates with the therapeutic plans and procedures. On the other hand, satisfaction with the healthcare system has also resulted in improving healthcare productivity and cost efficiency (Bleich *et al.*, 2009; Roter, 1989; Blendon *et al.*, 2003).

Inline to what is reported; patient satisfaction is used as one of the benchmark indicators to evaluate services offered by pharmacists at the practice settings (El-Sharif *et al.*, 2017; Al-Arifi, 2012). Pharmacists play a significant role in improving patient concerns hence promoting quality of care (Wagner, 2000). Consequently, a good patient-pharmacist relationship improves patients' understanding of the disease and

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its treatment. Patient satisfaction is affected by the nature of professional services being offered and by the attitude, behavior, and courtesy of the pharmacists (Sakharkar *et al.*, 2015). This shapes patients' perception of medication-related experiences and satisfaction/dissatisfaction that results as an important variable in determining the overall value of healthcare services (Kane *et al.*, 1997).

Multiple measures to assess patient satisfaction have been identified in the literature. Sakharkar and colleagues have presented a detailed review of the available questionnaires that are frequently used to assess patient satisfaction with pharmacists services (Sakharkar *et al.*, 2015). The authors have criticized that available questionnaires focusing patient satisfaction are specified, are never tested psychometrically and most importantly, the assessment of patient satisfaction is not the primary outcome of the questionnaires (Sakharkar *et al.*, 2015). With such profound weaknesses, it was concluded that there is no psychometrically established instrument that is focused on direct patient care provided by pharmacists (Sakharkar *et al.*, 2015). The gap resulted in the development of Patient Satisfaction with Pharmacist Services Questionnaire (PSPSQ 2.0). The authors used a mixed method design to identify two domains, patient-pharmacist relationship and, quality of care. The initial questionnaire comprised of 23 items on a 4-point, Likert-type scale (strongly agree, agree, disagree, and strongly disagree). The questionnaire was pilot tested and the final version of the instrument (PSPSQ 2.0) comprised of three domains (third domain being the demographic information) and 20 items (Sakharkar *et al.*, 2015). The authors concluded that PSPSQ 2.0 is a valid and reliable instrument for measuring patient satisfaction with pharmacist services. However, it was also suggested that further research is needed to refine the PSPSQ 2.0, corroborate its domains and to test its effectiveness in other pharmacy practice settings to make it more vigorous in the application (Sakharkar *et al.*, 2015).

Therefore, being the only psychometrically tested questionnaire available to measure patient satisfaction with pharmacist services, this study is aimed to translate and validate the Urdu (national language of Pakistan) version of the PSPSQ 2.0 among Pakistani population. Urdu is spoken and understood by close to 100 million people around the world and is the lingua franca of Pakistan (BBC, 2014). Besides Urdu, there are other local languages that are spoken in the country

(Punjabi, Pashto, Sindhi, and Balochi). Therefore, we expect that availability of a psychometrically valid questionnaire will be beneficial for the healthcare system of Pakistan as it will be further utilized in patient-reported outcome studies to assess the quality of services provided by the pharmacists.

## MATERIAL AND METHODS

### Permission to use PSPSQ 2.0

A formal request was sent to the developers of PSPSQ 2.0 (Prashant Sakharkar, Roosevelt University College of Pharmacy, Roosevelt Blvd, Schaumburg, IL). The request to use PSPSQ 2.0 was approved and permission to use the questionnaire was provided (permission received via email dated: 8<sup>th</sup> August 2017).

### Translation protocol

We used the translation guideline of the International Society of Pharmacoeconomics and Outcomes Research (Wild *et al.*, 2005) as proposed by the original developers of PSPSQ 2.0.

### Translation of the PSPSQ 2.0

A standard forward-backward translation method was used. The method is commonly used for cross-cultural research that evaluates the equivalence of meaning and quality between the original source and target texts (World Health Organization, 2019).

Forward translation of the PSPSQ 2.0 from English to Urdu was performed by three independent and competent linguistic translators to produce a version that was semantically and abstractly as close as possible to the original PSPSQ 2.0. The translators were blinded so that a true translation into the target language can be achieved without any communal consultation. The translated questionnaire was then reverse translated from Urdu to English by another three independent translators. The translated version was compared with the original PSPSQ 2.0 by the research team along with a panel of independent experts from University of Balochistan, discrepancies were resolved in a consensus meeting and the translated version was approved and presented for the pilot study.

The translated PSPSQ-Urdu (PSPSQ-U) was piloted with 30 patients visiting a local healthcare

institute. The annotations and remarks on the PSPSQ-U were taken into consideration which was later discussed and streamlined by the research team. Approximately, respondents took 7-9 minutes to answer the PSPSQ-U. Parallel to the pilot study, face and content validity of the PSPSQ-U was established by 8 hospital pharmacists. Data from the pilot study was not included in the final analysis. After a communal agreement, the finalized version of PSPSQ-U was made available for the field study (Annexure).

### **Study design, settings and inclusion criteria**

We used an observational study design to psychometrically test the PSPSQ 2.0. The study was conducted at Sandeman Provisional Hospital (SPH) Quetta, Pakistan. Sandeman Provincial Hospital Quetta was established in 1939 and is located in the center of the city. The SPH is a tertiary care, teaching institute. Additionally, being public in nature, SPH is normally the institute of choice for the majority of the local residents. Hospital pharmacists are appointed by Ministry of Health on a permanent basis and are on rotation in different wards and units. The pharmacy at SPH offer traditional pharmacy services like drug procurement and distribution, in-patients medication reviews, medicine dispensing, patient education and counseling, etc.

Our target respondents were patients aging 18 years and above, having frequent interaction with hospital pharmacists and familiar (speaking, reading and writing) with the national language of Pakistan (Urdu) were enrolled in the study. Patients with mental disorders and impairments, and not willing to participate were excluded.

### **Ethical approval**

The study was approved by IRB of Faculty of Pharmacy and Health Sciences, University of Balochistan (UoB/Reg/872). Written consent was also taken from the participants.

### **Statistical analysis**

Sakharkar and colleagues suggested excluding the overall satisfaction items that failed to be defined

as a separate construct from future analysis, hence, all items related to overall satisfaction domain were not included in this study, shortening the original 20 items to 16 items (Sakharkar *et al.*, 2015). SPSS 21 was used for data analysis with an alpha value kept at 0.05 (two-tailed). We used frequencies and percentage for the demographic explanation. The test-retest reliability was assessed through Cronbach's alpha reliability analysis and the values were interpreted as suggested (Pallant, 2011). Intraclass Correlation Coefficient (ICC) via One Way Random effects model with single measures was used to establish the stability of the construct measures (Portney, Watkins, 2000; Field, 2009). The validity of the PSPSQ 2.0 was constructed by using Confirmatory Factor Analysis (CFA) through principal axis factoring extraction and Oblique rotation with Kaiser Normalization onto 2 predetermined factors.

## **RESULTS AND DISCUSSION**

### **Description of the pilot test (n=30)**

The questionnaire was pilot tested on 30 respondents at two-time points with an interval of one week. Majority of the respondents were males and were categorized into the age group of 28-37 years. Twenty-five (83.3%) had bachelor level education and 20 (66.6%) belonged to the urban residencies as shown in Table I.

The Quality of Care (QOC) construct with 10 items exhibited Cronbach's alpha values of 0.900 (Test) and  $\alpha = 0.871$  (Retest) at two time points. The Interpersonal Relationship (IPR) Construct with 6 items had alpha values of 0.845 (Test) and  $\alpha = 0.819$  (Retest). However, the alpha values for all pooled 16 items were  $\alpha = 0.900$  (Test) and  $\alpha = 0.890$  (Retest) respectively that illustrated excellent internal consistency (Table II).

The ICC coefficients calculated by using One Way Random Model (Model 1) with single measurements are shown in Table III. Using the standards suggested by Portney and Watkins, the following statistical significance was referred; ICC < 0.50 (low), ICC: 0.50-0.75 (moderate), ICC > 0.75 (good) (Portney, Watkins, 2000). The ICC for most items tested for intra-rater (test-retest) reliability was good with a majority of items exhibiting coefficients > 0.80.

**TABLE I** – Respondents’ characteristics and descriptive statistics (pilot test)

Characteristics	Frequency	Percentage
<b>Age (years)</b>		
18-27	12	40.0
28-37	18	60.0
<b>Gender</b>		
Male	24	80.0
Female	6	20.0
<b>Educational Level</b>		
Intermediate	5	83.3
Bachelors	25	16.7
<b>Income level (Pakistan rupees; Pk Rs)*</b>		
10,000 – 25000	21	70.0
25001 - 50000	9	30.0
<b>Locality</b>		
Urban	20	66.6
Rural	10	33.4

\* 1 Pk Rs = 0.0095 US \$

**TABLE II** – Reliability values at two-time points (pilot study)

Constructs in PSPSQ 2.0	Number of items	Cronbach’s Alpha Coefficient (based on standardized items)	
		Test (Week 1) N = 30	Retest (Week 2) N = 30
Quality of care (QOC)	10	0.900	0.871
Interpersonal Relationship (IPR)	6	0.845	0.819
Pooled (all 16 items)	16	0.900	0.890

**TABLE III** – Reliability of Test-retest (N = 30) using Intraclass Correlation Coefficient (ICC)

Survey items	Code	Intraclass Correlation Coefficient*	95% Confidence Interval	p-value
QOC1_The pharmacist fully addressed the main health reason/concerns/issues during my visit.	ICC[1,1]	0.864	0.728-0.910	< 0.05
QOC2_The pharmacist was professional in all of our interactions.	ICC[1,1]	0.863	0.700-0.910	< 0.05
QOC3_The pharmacist explained information to me in a manner that I could understand.	ICC[1,1]	0.822	0.799-0.900	< 0.05
QOC4_The pharmacist checked to see if I understood all the information.	ICC[1,1]	0.899	0.844-0.912	< 0.05
QOC5_The pharmacist spent as much time necessary to help me with my questions and concerns.	ICC[1,1]	0.922	0.700-0.909	< 0.05
QOC6_The pharmacist made sure I understood how important it is to follow the drug regimen.	ICC[1,1]	0.855	0.824-0.923	< 0.05
QOC7_The pharmacist provided useful recommendations on how to take my medications.	ICC[1,1]	0.811	0.877-0.942	< 0.05
QOC8_The pharmacist provided useful recommendations about managing my overall health (e.g. diet, exercise).	ICC[1,1]	0.869	0.799-0.901	< 0.05
QOC9_The pharmacist worked with me to manage my medication related issues (e.g. cost, side effects of drugs).	ICC[1,1]	0.848	0.711-0.920	< 0.05
QOC10_The pharmacist followed up on my progress in a timely manner.	ICC[1,1]	0.922	0.811-0.944	< 0.05
IPR1_The pharmacist was caring and kind in dealing with my health issues.	ICC[1,1]	0.867	0.713-0.920	< 0.05
IPR2_The pharmacist encouraged me to achieve my treatment goals.	ICC[1,1]	0.933	0.872-0.950	< 0.05
IPR3_I felt comfortable in my interactions with the pharmacist.	ICC[1,1]	0.899	0.733-0.925	< 0.05
IPR4_The pharmacist was respectful to me during our interactions.	ICC[1,1]	0.821	0.822-0.949	< 0.05
IPR5_The pharmacist was committed to improving my health.	ICC[1,1]	0.890	0.789-0.919	< 0.05
IPR6_ could trust the information that the pharmacist provided.	ICC[1,1]	0.821	0.812-0.911	< 0.05

ICC\* values using One Way Random effect model (Model 1), single measures, 95% Confidence Interval

**Description of field test (n=104)**

While performing factor analysis, 5-10 participants per variable are recommended (Wolf *et al.*, 2013). Consequently, by using 5 subjects to 1 variable ratio, eight participants were needed. By adding a non participation rate 30%, the final sample size was 104 to generate good factor solutions.

Table IV presents the demographic characteristics of the study respondents for field testing. The cohort was dominated by males (78, 75.0%) and the majority of the respondents belonged to the age group of 28-37 years. Eighty-nine (85.5%) had urban locality while 56 (53.8%) had a bachelors level of education. The internal consistency using Cronbach’s alpha statistics (n = 104) for both QOC and IPR scales reported well acceptable reliability at  $\alpha=0.899$  and  $\alpha=0.812$  respectively and exhibited good reliability for the overall construct with  $\alpha=0.872$  (pooled 16 items) as a whole (Table V).

**TABLE IV –** Respondents’ characteristics and descriptive statistics (field test)

Characteristics	Frequency	Percentage
<b>Age (years)</b>		
18-27	18	17.3
28-37	47	45.1
38-47	20	19.2
> 47	19	18.2
<b>Gender</b>		
Male	78	75.0
Female	26	25.0
<b>Educational Level</b>		
Matriculation	15	14.4
Intermediate	33	31.7
Bachelors	56	53.8
<b>Income level (Pakistan rupees; Pk Rs)*</b>		
10,000 – 25000	20	19.2
25001 – 50000	69	66.3
> 50000	15	14.4
<b>Locality</b>		
Urban	89	85.5
Rural	15	14.4

**TABLE V –** Reliability values for all items (N = 104, field test)

Construct	Number of items	Cronbach Alpha Coefficient
Quality of Care (QOC)	10	0.899
Interpersonal Relationship (IPR)	6	0.812
Total items in questionnaire (pooled)	16	0.872

**Confirmatory Factor Analysis: Construct Validity**

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the factor analysis was 0.899 hence was rated meritorious (Kaiser, 1974) With Chi-square value of 1192.72 ( $p < 0.05$ ), the Barlett’s Test of Sphericity revealed relationships of the data and suitability of CFA.

The extracted communalities and loadings of two factors for the PSPSQ 2.0 are presented in Table VI. We used pattern and structure matrix in order to avoid probabilities of value suppression because of the factorial relationships (Graham *et al.*, 2003). Two factors explaining the total variance of 40% were extracted. According to Field 2009, loading values of communalities > 0.30 are enough o generate evidence that the variable must be retained (Field, 2009). Results of the current study revealed that loading values were acceptable (> 0.50) for all items of the translated version of PSPSQ 2.0. In the light of the above discussion, all items of the translated PSPSQ 2.0 were retained proving the validity of the translated questionnaire.

**TABLE VI** – Survey items, communalities and rotated factor loading (n=104)

Survey items	Factor Matrix <sup>a</sup>		Structure Matrix		Pattern Matrix <sup>b</sup>		Communalities
	Factor Loading		Factor Loading		Factor Loading		Extraction
	QOC	IPR	QOC	IPR	QOC	IPR	
QOC1_The pharmacist fully addressed the main health reason/concerns/issues during my visit.	<b>0.722</b>	0.211	0.500	0.639	0.448	0.433	0.617
QOC2_The pharmacist was professional in all of our interactions.	<b>0.699</b>	0.050	0.629	0.501	0.591	0.398	0.549
QOC3_The pharmacist explained information to me in a manner that I could understand.	<b>0.521</b>	-0.300	0.588	0.100	0.695	0.311	0.577
QOC4_The pharmacist checked to see if I understood all the information.	<b>0.601</b>	-0.277	0.766	0.437	0.766	-0.011	0.591
QOC5_The pharmacist spent as much time necessary to help me with my questions and concerns.	<b>0.699</b>	-0.309	0.782	0.211	0.799	-0.201	0.688
QOC6_The pharmacist made sure I understood how important it is to follow the drug regimen.	<b>0.799</b>	-0.376	0.800	0.299	0.891	-0.088	0.700
QOC7_The pharmacist provided useful recommendations on how to take my medications.	<b>0.701</b>	-0.201	0.710	0.515	0.599	0.209	0.563
QOC8_The pharmacist provided useful recommendations about managing my overall health (e.g. diet, exercise).	<b>0.766</b>	0.107	0.600	0.609	0.409	0.671	0.599
QOC9_The pharmacist worked with me to manage my medication related issues (e.g. cost, side effects of drugs).	<b>0.792</b>	0.078	0.665	0.655	0.511	0.566	0.644
QOC10_The pharmacist followed up on my progress in a timely manner.	<b>0.755</b>	0.080	0.607	0.599	0.491	0.511	0.601
IPR1_The pharmacist was caring and kind in dealing with my health issues.	0.500	0.600	0.300	<b>0.813</b>	0.189	0.811	0.899
IPR2_The pharmacist encouraged me to achieve my treatment goals.	0.661	0.498	0.612	<b>0.771</b>	0.452	0.533	0.761
IPR3_I felt comfortable in my interactions with the pharmacist.	0.566	0.512	0.377	<b>0.693</b>	0.099	0.701	0.619
IPR4_The pharmacist was respectful to me during our interactions.	0.512	0.055	0.301	<b>0.692</b>	0.361	0.404	0.503
IPR5_The pharmacist was committed to improving my health.	0.600	0.231	0.605	<b>0.799</b>	0.677	0.477	0.761
IPR6_I could trust the information that the pharmacist provided.	0.587	0.400	0.296	<b>0.690</b>	0.051	0.699	0.507

QOC=Quality of Care; IPR=Interpersonal Relationship; KMO=0.899, Barlett's Test of Sphericity,  $p < 0.05$   
 Extraction Method: Principal Axis Factoring.; Rotation Method: Oblimin with Kaiser Normalization

<sup>a</sup>2 factors extracted. 9 iterations required, <sup>b</sup>Rotation converged in 9 iterations

The current study was aimed to translate and validate the PSPSQ 2.0 into the Urdu language. Item analyses of PSPSQ 2.0 showed excellent reliability and significant intra-rater consistency. All values of the survey items exhibited excellent reliable values nearing to 1 [QOC construct exhibited alpha values of 0.90 (Test) and 0.871 (Retest); IPR construct with  $\alpha = 0.845$  (Test) and  $\alpha = 0.819$  (Retest). Overall, the pooled 16 items had  $\alpha = 0.900$  (Test) and  $\alpha = 0.890$  (Retest)]. Additionally, the ICC for all items tested for intra-rater (test-retest) reliability was good with all items exhibiting coefficients  $> 0.80$ . Hence, the analysis provided verification for the repeatability of construct measurements between two-time intervals. Our results are in line to what is reported by the developers of the PSPSQ 2.0 (Sakharkar *et al.*, 2015) hence confirming the reliability of the translated version of PSPSQ 2.0.

Results of CFA supported the validity of PSPSQ 2.0. The KMO statistic is a measure of sampling adequacy, both overall and for each variable (Kaiser, 1970; Cerny and Kaiser, 1977; Dziuban and Shirkey, 1974). The KMO values  $> 0.8$  are excellent and serve as an indication that factor analysis will be useful for the study variables. This usually occurs when most of the zero-order correlations are positive. The KMO values less than 0.5 occur when most of the zero-order correlations are negative. KMO values less than 0.5 require remedial action, either by deleting the offending variables or by including other variables related to the offenders. Therefore, with KMO value of 0.834, our dataset was highly suitable for CFA. For the validity analysis, we used principal axis factoring extraction and oblique rotation method with Kaiser Normalization. Two predetermined factors were performed to assess the construct validity of the questionnaire. The Shapiro-Wilk test revealed that our data set violated the assumption of normality (Ghasemi and Zahediasl, 2012) therefore, we selected principal axis factoring extraction method for the CFA (Costello, Osborne, 2005). Direct oblimin rotation with delta set at zero was chosen for naturalistic and psychological data whereby we believed that the factors were somewhat correlated (Field, 2009). We also restricted the extracted factors to two (QOC and IPR) following the suggestion of the developers (Sakharkar *et al.*, 2015). Within this context, in our study, the KMO measure of sampling adequacy for the factor analysis

was 0.899 which signified the success of factorial analyses. Bartlett test was also significant which indicated that it was worth continuing with the factor analysis as there were relationships to investigate. The extracted communalities ranged from 0.5 to 0.8 (Table VI), therefore the translated version of PSPSQ 2.0 was rated as a valid tool as Field reported that loading values of  $> 0.30$  are important and must be retained (Pallant, 2011). In short, all items in the original PSPSQ 2.0 were retained in the translated version confirming that two factors are appropriate to account for the validity of the survey instrument in the Urdu language. Moreover, the two domains identified during the CFA were similar to the original PSPSQ 2.0 and with the previously validated questionnaires for assessing patient satisfaction (Sakharkar *et al.*, 2015).

The PSPSQ 2.0 is a simple instrument with a straightforward scoring method. Sakharkar *et al.* took an average of 10–15 minutes to complete 22 items of the PSPSQ 2.0 which included obtaining consent and survey administration. Based on their observations, the developers suggested that further psychometric analysis involving item reduction may be undertaken in future survey use and validation (Sakharkar *et al.*, 2015). In the light of what is proposed by Sakharkar *et al.*, we used 16 items for analysis and the respondents took an average of 7-9 minutes to complete the survey hence the reduced completion time suggests less burden to respondents which was suggested earlier in the parent study (Sakharkar *et al.*, 2015).

In the parent study, Sakharkar *et al.* targeted three pharmacy practice settings for the first validity analysis of PSPSQ 2.0. Although the three settings were different in terms of services, enough evidence was attained that the PSPSQ 2.0 was a reliable and valid patient satisfaction measurement instrument for pharmacist-related clinical services (Sakharkar *et al.*, 2015). However, the developers reported the need for CFA for possible item reduction testing in other practice settings to expand generalizability of PSPSQ 2.0. One of our aims while designing the study was to consider the above suggestion during data analysis. Therefore, we tested the validity of PSPSQ 2.0 through CFA in a generalized healthcare setting. Although there was no issue of reliability of PSPSQ 2.0, the CFA reported communalities within the acceptable ranges, hence proving that the 16 items of the PSPSQ 2.0 do not need item reduction among patients attending healthcare



system of Pakistan. Nevertheless, we also support the developers' suggestion of using CFA in practice settings other than Pakistan to expand generalizability of PSPSQ 2.0.

## CONCLUSION

The PSPSQ-U is an important scale which permits healthcare and social researchers to take the initial step in determining patients' satisfaction with pharmacists' services. Results of this study conclude that PSPSQ-U is a valid instrument in regions where Urdu is a prime language of communication. The use of PSPSQ-U will help policymakers and pharmacists to identify potential areas for service improvement. Additionally, healthcare expenditure may be optimized through patient-guided planning and evaluation.

## LIMITATIONS

This study has a few limitations that should be taken into account when extrapolating the results. We do agree that targeting different healthcare settings could have provided more robust findings, finance and workforce was a major issue. Another limitation was the typical perception of patients towards pharmacists' service (being drug distributors only), in which they carried forward their medication and counseling experiences from the past to present. This would have created a bias to the survey.

## CONFLICT OF INTEREST

We do not have any conflict of interest to disclose.

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