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Development of an indigenous scale for Satisfaction with Medical Care

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Abstract

The current study emphasized its attention to develop an indigenous scale on Patient's satisfaction with medical care in Urdu language. The scale was developed with purpose to illuminate the satisfaction level of patients from their respective doctors, staff and facilities provided to them in hospital where they are being treated. Age range for scale was 30-60 years. Patients admitted and being treated were considered for evaluation only. The initial draft was prepared through literature's assistance, experts' opinion, interviews and personal observations. Piloted study was also conducted to estimate the length and effectiveness of items. After piloting study, exploratory factor analysis was done via SPSS and principal component analysis was also applied. The cronbach's alpha of three-factor model was .94. KMO and Bartlett's test also explicates its reliability. Two factors named quality and comfort of health care facilities, wait time and finance were conducted after the analysis on the basis of literature review. Items total correlation was also evaluated. Exploratory factor analysis was done to extract the factors, factor structure and to finalize the items. Principal component analysis was done with varimax rotation method. The analysis explicated the scale's reliability that the scale is reliable and valid for patients admitted in medical care unit. After exploratory factor analysis confirmatory factor analysis was done with AMOS 22 to confirm the scale's reliability it also illustrated that scale is reliable. For estimating reliability, test-retest method and convergent validity was done. The results revealed that the test is valid and reliable. The findings revealed that scale is the best measure for research purpose and for clinical administrations.

Introduction

People living in Pakistan are facing many issues regarding satisfaction with medical care, satisfaction with medical care associated with multiple factors like doctor's attitude, nursing care, ward cleanliness and so on. Health care schemes are frequently improving; it is very essential to evaluate the satisfaction level of the patient receiving medical care. One can explain the satisfaction of patient by assessing his/her reaction to different aspects regarding treatment and hospital. Estimating the satisfaction level of patient provides beneficial insight regarding medical treatment and hospital's quality. Years ago, patient's satisfaction was neglected but now it is becoming very essential. Thus, the present work sprinkles light on patient's satisfaction with medical care. Because it is essential to illuminate the satisfaction level of patients from their respective doctors, staff and facilities provided to them in hospital where they are being treated.

Ferreira et al., (2023) explicated that satisfaction is actually the outcome of medical health services provided by hospital team, so it is very essential to estimate the quality of care and treatment. It is the perspective related to the hospital management. The quality of health care services provided and patient's satisfaction are vital factors of any institution's long-term success. Satisfaction is a concept which is related to patient's expectations and evaluations of medical care services. If the hospital fulfills the expected demands of patient, or if the symptoms of disease are reduced he/she will be satisfied. Batbaatar et al., (2017) worked on nine determining factors (i) technical skills (ii) interpersonal care (iii) physical environment (iv) accessibility (v) availability (vi) finances (vii) organizational characteristics (viii) continuity of care (ix) care. Technical skills are constituting with a bunch of nursing care, concern, friendliness, medical care, empathy, respect, kindness and courtesy. Physical environment is associated with atmosphere, temperature, lighting, room comfort, bedding, food, cleanliness, equipment, parking and facilities. Accessibility is associated with location, waiting time, appointment, admission procedure and discharge procedure. Availability allied with number of doctors available, staff, equipment and facilities. Finances are associated with payments, insurance status and insurances coverage. Organizational characteristics allied with hospital's reputation, image, administrative formalities, doctor and staff's satisfaction level. The author included 13 socio-demographic characteristics; age of the patient, gender, socio-economic status, marital status, education, religion, regularity of visiting hospital, duration of stay, race, health status and record, expectations and personality. Aljarallah et al., (2023) worked on patient's satisfaction and reported that satisfaction is the main factor which is associated with any hospital's care quality. Care quality of any hospital is very essential because it is directly associated with patient's expectations. Xesfingi and Vozikis (2016) worked and concluded that patient's satisfaction is a good estimate of medical care quality. They also study the association among satisfaction related to medical care and socio-economic status of medical care. They worked on 31 countries from 2007-2012 and elucidated that every patient's satisfaction is reflecting their own's country medical systems. Results of the study explained that medical care is strongly positively associated with patient's satisfaction but patient's satisfaction is negatively associated with hospital's number of beds. Barve and Yeravdekar (2023) worked and conducted that medical care and patient's satisfaction is highly associated. Orte et al., (2020) explained in their work that medical health services are related to patient's medical care no matter whether it is related to primary health care, or secondary health care. They also concluded that quality is the most important factor associated with patient's satisfaction. Results of this study explained that majority patients were satisfied overall. Prado-Galbarro et al., (2020) worked on different aspects linked with satisfaction in patients with hypertension, diabetes or dyslipidemia in Mexican patients. The study was cross-sectional and consisted on a self-report Performa regarding patient's satisfaction and medical services. Results concluded that patient's satisfaction have positive association with medical care's quality. Patient's satisfaction has negative association with waiting time, hospital's poor conditions. Dhakate and Joshi (2023) worked and reported that patient care became more challenging in COVID-19. They reported that previous researches examined patient related satisfaction with online services provided by doctors and concluded that availability of doctor via online service enhances patient's satisfaction. Čadek et al., (2023) worked and explicated that patient's satisfaction is highly associated with quality of health care services provided by hospital. Christian et al., (2022) in their study highlighted that patient satisfaction is associated with care quality via surveys to estimate the patient's experience, care satisfaction and facilities. The study illustrated that some factors such as older patients, critical diseases/surgeries and health related insurance by government are associated with patient's satisfaction.

Lai and Gemming (2021) worked on patient's satisfaction with food quality provided in hospitals. Data was collected via interviews and rating scales. The quality of the food is the main factor associated with patient's satisfaction. Aliman and Mohamad (2016) worked to scrutinize the relation between patient's satisfaction and medical quality. Survey was conducted to gather data and the results revealed positive association between medical quality and patient's satisfaction. Wulandari et al., (2021) conducted study to estimate patient's satisfaction and medical quality at Indonesia's Hospital. They worked on medical care quality with related to patient's satisfaction and concluded that there is no significant difference between them. Lanzano et al., (2023) piloted a study on health-care satisfaction and health care status in Italy 2021. Self-administered questionnaire was used. They reported that 73% patients were satisfied with medical health-status. Alemu, Worku, and Berhie, (2023) conducted work on patient's satisfaction and explained it as important part of any hospital set-up. The study conducted to assess satisfaction level in patients. The study was cross-sectional. The data was gathered from 6 February, 2020 to 6 April, 2020. Random sampling was used as technique for the interview. The study pinpointed that patient satisfaction is bit low in surgical department. The study recommended that patient satisfaction-based facilities should be elevated. Godovykh and Pizam (2023) explicated in their work that it is very crucial to understand the experience of a patient which is interrelated with patient's satisfaction, health-care service quality, physicians and staff's loyalty. Meseguer-Santamaría et al., (2013) conducted study to explore the association in patient related satisfaction and health quality. The major goal of study was to measure the effect of social factors, health status and satisfaction in Spanish patients with disabilities. The survey was done in 2009 to construct satisfaction-based variable, status of health in Spanish patients. The study concluded that health-care satisfaction is significantly associated with age and gender but its not significantly associated with income and education. The study reported that people having disability indicates high satisfaction with health-related services. Wollney et al., (2023) worked on a systematic review to estimate patient/caregiver's satisfaction. The goal of study was exploring the instrument related to communication-satisfaction and the content of items associated with communication. The study explored researches via PubMed and CINHL. The study focused on 85 studies relevant to the review. Among 85 studies 53 different scales were explored. The study concluded high variability among item numbers and content type on measures. Ng and Luk (2019) explored that the concept of satisfaction related to patients is being studied worldwide but only few explained the actual definition of patient related satisfaction. The present study explicated the attributes of the concept. For this, inductive method was selected. The attributes measured included provider's attitude, technical competence, accessibility and efficacy. The pre-requisites of patient related satisfaction included expectations, patient demographics and the personality of patient. The study analyzed clinical outcomes, loyalty, referrals and compliance as consequences. The study concluded exploring patient's experience can help the practitioners to manage patients better to satisfy them. Seleznev, Alibekova, and Clementi (2020) conducted study to discover the association in patient related satisfaction and the experience of patients. The study was cross-sectional and was self-completed survey for the patients of Kazakhstan. The survey was done September 2017 to June 2018 on 153 patients. The report explained that majority of the patients of University Medical Center hospitals in Nur sultan were satisfied with their stay in hospital. Their rating related to health care system was also satisfied. Study concludes that patient's satisfaction is basically overstated image of any hospital's health-care system. Several indigenous studies in Pakistan have explored various psychological and health-related factors influencing patient well-being, underscoring the need for context-specific assessments of medical care satisfaction. For instance, Adeeb et al.(2017) studied the perceived social support and death anxiety among cardiovascular

patients in southern Punjab Pakistan and Riaz et al. (2021) examined how resilience mediates the relationship between body esteem and psychological distress among cancer patients, highlighting the crucial role of psychological adaptability in coping with illness. Similarly, Munir et al. (2024) investigated mindfulness experiences and treatment approaches for arthritis patients while also identifying the mediating role of quality of life between perceived stress and sleep quality in individuals with rheumatoid arthritis, emphasizing the interconnectedness of mental and physical health in medical treatment outcomes. Gul et al. (2024) explored the moderating role of psychological flexibility in mitigating stigma and enhancing mental health and quality of life among substance users, reinforcing the significance of psychological support in healthcare settings. Additionally, Arooj et al. (2025) examined psychological complications in fetuses of teenage mothers, demonstrating the long-term impact of maternal health on neonatal well-being. Collectively, these studies highlight the necessity of addressing psychological and quality-of-life factors in medical care, reinforcing the importance of developing an indigenous scale to assess patient satisfaction with healthcare services in Pakistan.

Scale Development and Validation

The scale of satisfaction with medical care was developed and validated into three phases. First and second phase consisted on exploration while the third phase bases on psychometric validation for scale.

Phase 1: Item Pool Generation
Phase 2: Exploratory Factor Analysis
Phase 3: Psychometric Validation

Scale was constructed to explore satisfaction with medical care among admitted patients in hospitals. There are some western scales available on patient's satisfaction but are too old, and the items are outdated. Konerding et al., (2019) developed a scale on patient's satisfaction which is a short form questionnaire consisted on six items. The scale was only for the patients of diabetes and stroke. So, the constructed scale was only limited to stroke and diabetes which means the scale is not meant for general patients. Javadekar, Raje, and Javadekar, (2017) constructed a scale on patient's satisfaction. The scale was comprised 40 items covers 10 facets of patient's care. Responses of scale based on 5-point likert scale. The population was taken from the hospital of Maharashtra. The scale was good measure for patient's satisfaction but limited to only one hospital which is hard to generalized. Wei et al., (2015) constructed a scale for Chinese patients. The scale finally consisted on 28 items. The scale was an impressive measure for Chinese patients. Although, so many questionnaires have been established in western cultures to estimate satisfaction in admitted patients. But many of them are outdated, limited to one or two diseases, restricted to one population and so on. There is no up-dated indigenous scale available to estimate patient's satisfaction in Pakistani culture. Due to such reasons there is a need to establish an indigenous scale for general patients in Pakistan.

Phase 1: Item Pool Generation and Procedure

For generating item pool, phenomenological approach was used in interviews. The age range of patients were 30-60 years, and the patient must be admitted to hospital.

Interviews

The procedure of generating items was done in different phases. In the **first phase** of item generation the related literature review of the construct has been done. In this phase of item generation, interview of 20 patients has been done from patients admitted in different hospitals of

Faisalabad. In the initial interview, questions were open-ended. In these queries, they were asked regarding their experience in hospitals. Participants were briefed regarding the interview and their consent was taken to record their interview. The recorded interview and written information was managed in QDA minor Lite to extract main themes. For generating item pool, phenomenological approach was used in interviews. The age range of patients were 30-60 years, and the patient must be admitted to hospital. After that, the generated items were arranged in form of scale and was given to respective doctors to evaluate the items. Thus moving through the proper procedure items were finalized with the help of experts to administer on patients. For this, permission was sought from the concerned head of the departments through proper channel. In this phase, after gathering the data related to patient's satisfaction via literature review and directly from patients a pool of large items was created. The initially created pool of items was reviewed by different doctors working in same hospitals and institutional experts (Four Doctorate in Psychology and one Phd Scholar in Applied Psychology). According to Lynn (1986), developing material of scale should be reviewed by minimum three reviewers and maximum ten reviewers for accurateness of scale. The experts also assessed the items whether these items are readable and clear. They also have right to suggest or add items relevant to medical satisfaction.

Response Format of the Scale

For the response format, for satisfaction with medical care scale for patients 5-point Likert scale was selected (strongly disagree 1, disagree 2, neutral 3, agree 4, strongly disagree 5 (Joshi et al., 2015). The respondents have sufficient options to select the best they thought about each statement. High scores indicates that patients are much satisfied with medical care whereas low score indicates less satisfaction with medical care.

Pilot Testing

After constructing and compiling the initial draft, a piloted study was also done to explore the items effectiveness, items difficulty level and length. The initial draft of items was 26 which was then reduced to 17 items by experts via excluding items which were unstable. In the next step, using small sample of patients admitted to hospital (N=200) pilot study was done to estimate validity of items. The age range was 30-60 years of age. For this, purposive sampling technique was applied. All the important instructions were given to participants and they were briefed that information provided by them would be kept confidential. The 2 main objectives of piloting were testing and estimating the validity of satisfaction with medical care scale and finalizing items for factor analysis.

Phase 2: Exploratory Factor Analysis

In **phase II**, after completing statistical analysis of items which was administered to finalize the pool of items. The procedure is used to choose the final draft for scale's representativeness. The EFA (Exploratory factor analysis) was done via SPSS 22 and then Principal Component Analysis was administered. The items which were co-related with each-other were selected as the final items of the scale, the procedure established the internal consistency. Eigen value, rotated component matrices and commonalities were established. The EFA explicated that the current scale consisted on three sub-scales (i- Quality & Comfort of health care facilities, ii- wait time & finance, iii- communication difficulty). The scale names were finalized as per literature review. To determine the internal consistency of satisfaction with medical care, Cronbach's alpha, item-total correlation and sub-scale item correlation was calculated. As per the instruction the number of items of 5

times, a sample of 200 patients was selected (Field, 2005) for exploratory factor analysis was done to certify reliability and factor structure.

Table 1

Frequency Table of Demographic Characteristics of Cancer Patients (N=200)

Characteristics	F	%
Age		
30-40	67	33.2
41-50	72	35.6
51-60	61	30.2
Gender		
Male	100	49.5
Female	100	49.5
Marital Status		
Married	148	73.3
Unmarried	52	25.7
No of Children		
0	50	28.8
1	21	10.4
2	36	17.8
3	49	24.3
4	24	11.9
5	15	7.4
6	4	2.0
7	1	0.5
Financial Status		
Upper Class	22	10.9
Middle Class	104	51.5
Lower Class	74	36.6
Disease Type		
Tumor	20	9.9
Typhoid	20	9.9
Hepatitis	20	9.9
Asthma	20	9.9
Cancer	20	9.9
Stroke	20	9.9
BP	20	9.9
Diabetes	20	9.9
Kidney disease	20	9.9
Heart disease	20	9.9

Table 1 illustrates the demographic information of patients undergoing hemodialysis. Demographic variables are essential to evaluate its effect on patient's illness perception, satisfaction with medical care, death anxiety and quality of life.

Table 2

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**.939**
Bartlett's Test of Sphericity	Approx. Chi-Square	3303.500
	Df	153
	Sig.	.000

A sphericity test was done on 17 items, the result of KMO was .93 which explicates its reliability. The result of Bartlett's sphericity test was significant too. Kaiser (1974) elaborated that KMO value above .50 or high is considered significant.

Furthermore, correlation matrix analysis exhibits that each item correlation were greater than 0.4 which indicates significant correlation. Communalities were estimated too. Final structure of scale had significant communalities (0.48-0.82). All the components had Eigen values above 1.

All the factors had larger than 1 Eigen value were placed in as per Kaiser (1960) criterion. From PCA (Principal component analysis) three factors have larger than 1 Eigen value. The factors were impressive, readable, and understandable.

Table 3

Eigen Values and Variance Extracted

Factor	Eigen Value	Variance (Percentage)	Cumulative Percentage
1	10.272	60.42	60.424
2	1.253	7.368	67.792

Cross-loadings were recognized where items were loaded 0.32 at least (Costello & Osborne, 2019) with different loadings at-least 0.2 on more than one items (Howard, 2016). Factor loadings greater 0.4 were chosen (Norman & Streiner, 2008; Raubenheimer, 2004). Here is this, factor loadings were between 0.56 to 0.92. Factors were taken out via PCA (Principal component analysis) using rotation method of Varimax rotation. The method is recommended and suitable for constructing psychometric scales (Rattary & Jones, 2007).

Table 4

Factor Loadings on Two Factors (N=200)

Quality & Comfort of health care facilities		Wait time & finance
Item No	Rotated Component Matrices	Rotated Component Matrices
1	.88	
2	.92	
3	.88	
4	.83	
5	.88	
6	.78	
7	.66	
8	.85	
9		.56
10		.85
11	.81	

12		.92
13	.81	
14	.87	
15	.88	
16	.83	
17	.87	

Extraction Method: Principal Component Analysis; Rotation Method: Varimax Rotation

Factor analysis was computed to explore the factors and to look on Eigen values. Principal component analysis was utilized to for the scales. Varimax rotation method was used. Two sub-scales were finalized; (i) Quality and Comfort of health care facilities (ii) wait time and finance. First factor was focused on quality and comfort of health care facilities which includes the quality of medical treatment provided in hospital setup and the comfort and facilities provided by the medical staff. The factor includes patient's satisfaction with doctor, staff, privacy, instruments, cleanliness doctor's attention and treatment. The second factor comprises wait time and finance which elaborates whether the treatment takes a lot of time or short time to start in an emergency.

Table 5

Reliability Analysis of Satisfaction with Medical Care Scale (N=200)

Name	No. of Items	Alpha Coefficient
SWMC	17	0.94

SWMC: Satisfaction with medical care

This table results explicated the reliability of scale. The Reliability values represented good value via using alpha-coefficient range 0.94 which is considered a good range (Taber, 2016).

Table 6

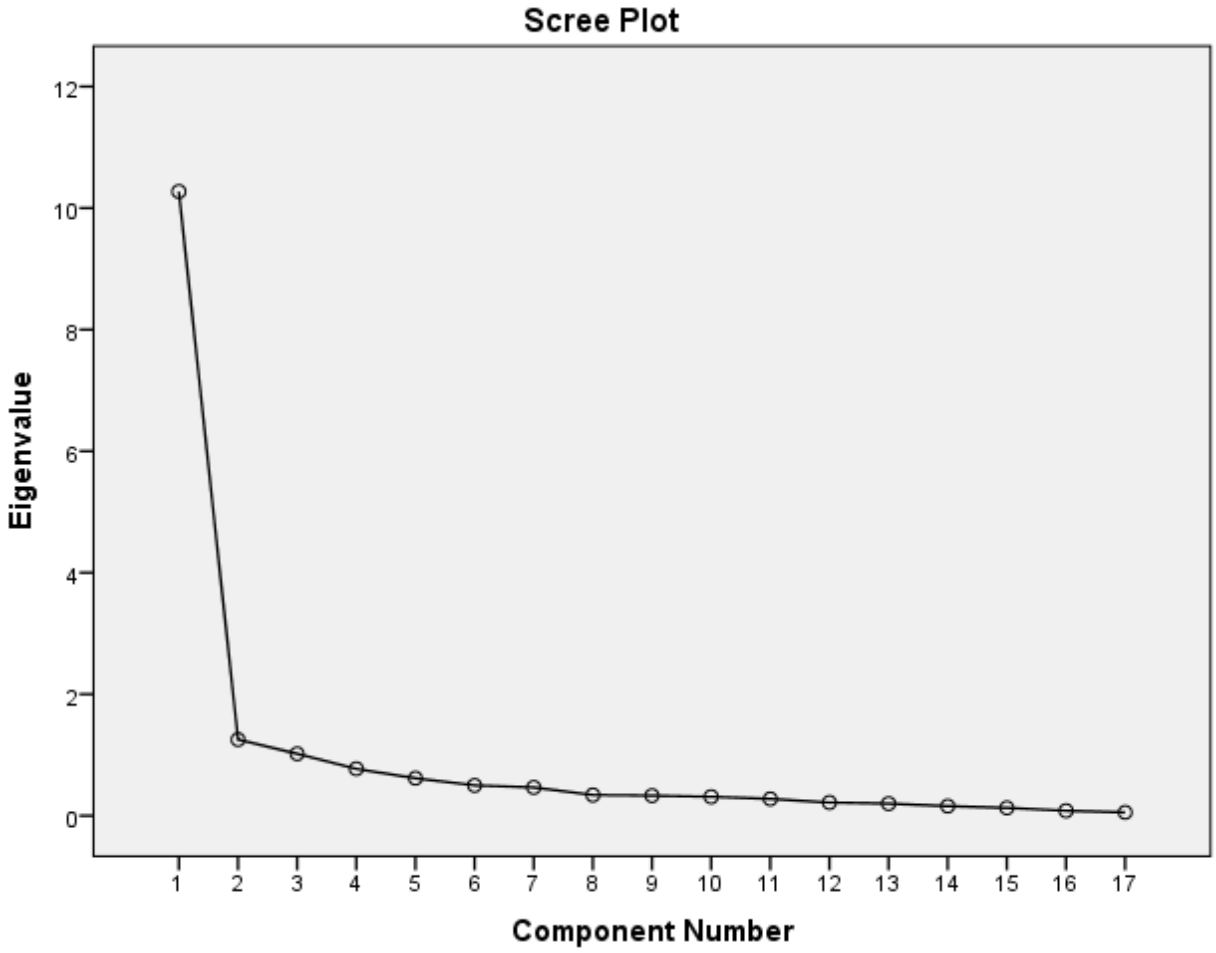
Items Total Correlations for 17 Items of SWMC (N= 200)

Sr. No	Item No	Item-total correlation
1	SWMC1	.92***
2	SWMC2	.92***
3	SWMC3	.92***
4	SWMC4	.92***
5	SWMC5	.92***

6	SWMC6	.92***
7	SWMC7	.93***
8	SWMC8	.92***
9	SWMC9	.93***
10	SWMC10	.94***
11	SWMC11	.93***
12	SWMC12	.95***
13	SWMC13	.93***
14	SWMC14	.92***
15	SWMC15	.92***
16	SWMC16	.92***
17	SWMC17	.92***

***. Correlation is significant at the 0.001 level

Results of the table illustrates that items of satisfaction with medical care scale are significantly correlated. Item's correlation higher than 0.30 considered significant in exploratory factor-analysis (Nunnally & Bernstein, 1994).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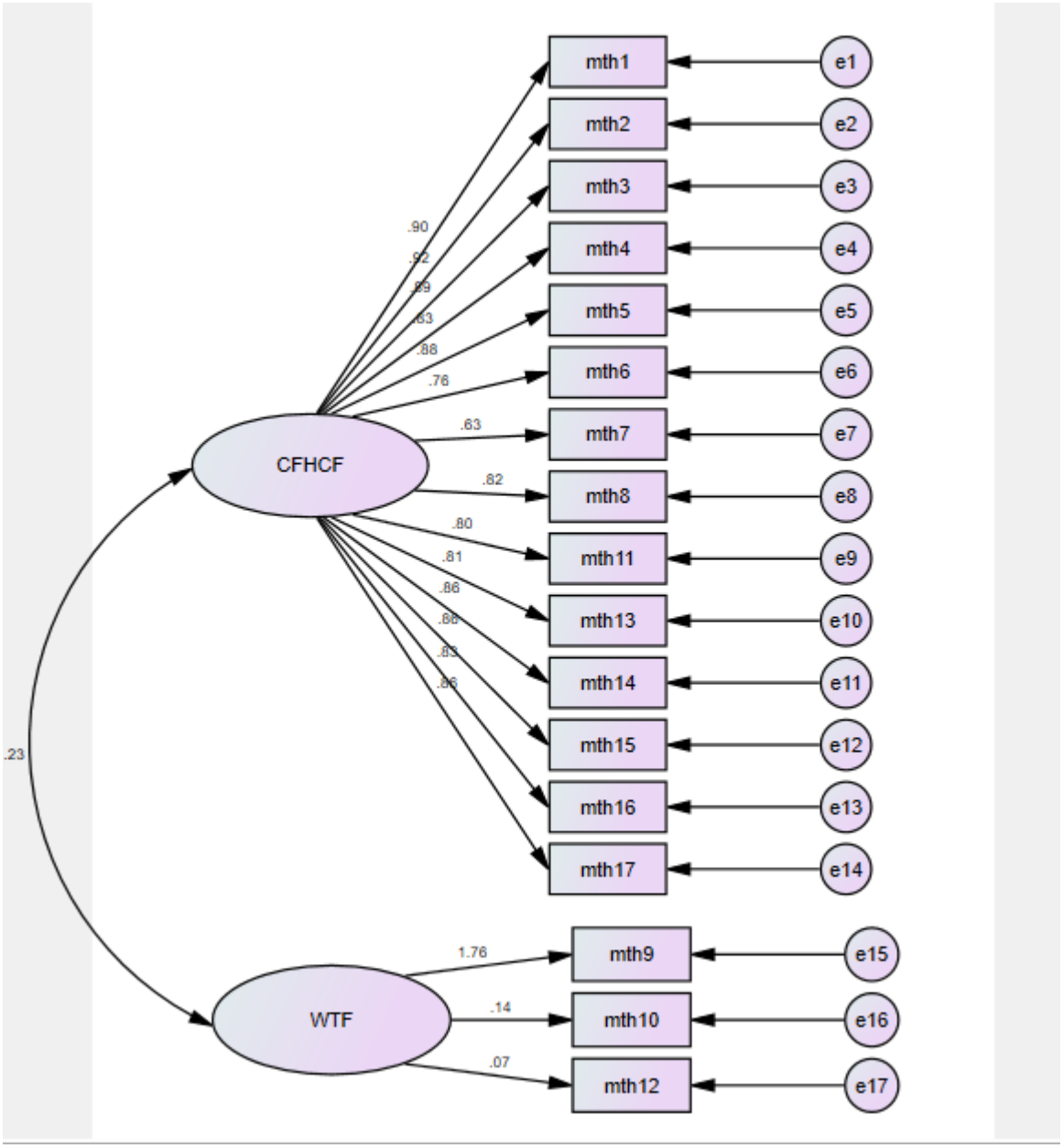

Phase 3: Psychometric Validation

In the third phase, a detailed evaluation of the construct "Satisfaction with Medical Care" was done via Confirmatory Factor analysis. Confirmatory factor analysis using AMOS-22 analyzed the dimension, factor, factor structure, and 17 items which were observed via exploratory factor analysis. Independent sample of 200 patients was elected via convenience sampling technique from different hospitals of Faisalabad.

Table 7
Factor Loadings of CFA for 17-items of SWMC on two Factors (N=200)

Sr. No	Item No	1	2
1	SWMC1	.90	
2	SWMC2	.92	
3	SWMC3	.89	
4	SWMC4	.83	
5	SWMC5	.88	
6	SWMC6	.76	
7	SWMC7	.63	
8	SWMC8	.62	
9	SWMC9		1.76
10	SWMC10		0.14
11	SWMC11	.80	
12	SWMC12		.07
13	SWMC13	.81	
14	SWMC14	.86	
15	SWMC15	.88	

16	SWMC16	.83
17	SWMC17	.86

Extraction Method: Principal component analysis; Rotation Method: Varimax rotation

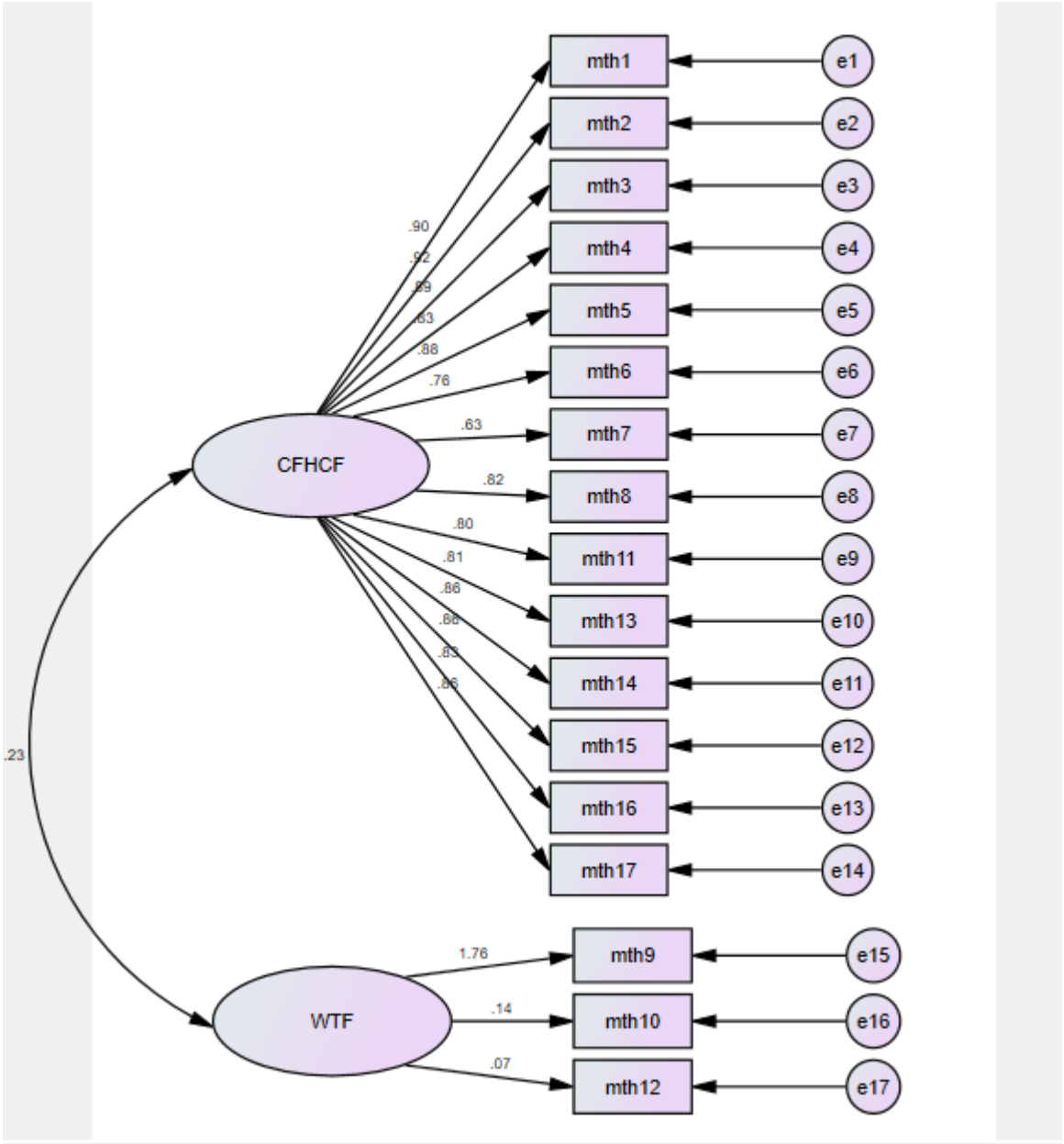

Figure: Path Diagram of Confirmatory Factor Analysis

Table 8
Model Fit Indices of CFA of Satisfaction With Medical Care (SWMC, N = 200)

Factor	CMIN	DF	P	CMIN/DF	GFI	TLI	CFI	RMSEA
2 Factor Solution	518.936	118	000	4.398		.83	.87	.000

***p<0.001

Note. DF= degree of freedom, CMIN = chi-square, CMIN/DF = Value of chi-square divided by degree of freedom, GFI = Goodness of fit index, TLI = Tucker-Lewis Index, CFI = Comparative fit index, RMSEA = Root mean square error of approximation

Exploratory factor analysis and confirmatory factor analysis were computed for satisfaction with medical care scale. RMSEA (root mean square error of approximation), CFI (comparative fit index) were estimated to indicate model fitness. The criteria for this is used to illustrate model fitness in recent literature review (Bentler, 1990; Bollen, 1990; Hu, & Bentler, 1999; McDonald & Ho, 2002).

Test Re-test Reliability

In phase 3 psychometric validation, reliability of the test was evaluated via test re-test method. The scale was administered on participants twice, the scale was re applied to patients after one week of first test (Lloyd, Streiner, & Shannon, 1998). Level of agreement between the first- and second-time administration and their follow-up replies were estimated via data generation of statistical analysis. The consistency was high in both scores (r= 0.83). The test re-test reliability shows high correlation in both scores.

Convergent Validity

In psychometric validation, convergent validity was scrutinized during the same period using correlational analysis in two scales. The construct (Satisfaction with medical care) was compared with patient satisfaction questionnaire (PSQ-18) developed by Marshall and Hays (1993). Correlation evaluated r=0.73** between satisfaction with medical care and patient satisfaction questionnaire (PSQ-18) developed by Marshall and Hays (1994) to explicate the convergent validity. The scale exhibits stronger correlation between the two scales.

Discussion

The current literature was done to construct an indigenous scale to estimate satisfaction with medical care. The statistics of the scale illustrated promising results. Three sub-scales named quality and comfort of health care facilities, wait time and finance, communication difficulty were emerged. The scale was reinforced by Ware et al., (1983). The current scale's items are almost have equal ability to measure the satisfaction level. Newly developed scale's reliability was .94.

Kash and McKahan, (2017) worked on patient's satisfaction to elaborate patient's positive experience and mentioned that patient's experience is highly associated with hospital's environment and expenditures of hospital. They reported the concept of measuring patient's experience was begun in 1980's and today the experience of patient's satisfaction incorporates with technical quality, finances, accessibility, convenience, efficacy, physical environment and availability. They pinpointed that measuring patient's experience is linked with patient's thought which he/she assembles as per his/her satisfaction, perception, participation, engagement and preferences. These satisfaction levels are measured through various methods including qualitative,

quantitative, mixed, photo, voice, ethnographic and guided tours. They also mentioned that measuring patient's satisfaction, the essential thing to measure is patient values. The paper elaborates history of survey tools used in measuring patient's satisfaction, patient's role, and it also elaborates tricks and techniques to make the satisfaction better. Anyhow, it is proved that the current scale is the best measuring tool for research purpose and for hospital administration as well. The scale extracted so many factors which are considered very essential for any hospital administration for their admitted patients. Factor analysis was computed to explore the factors and to look on Eigen values. Principal component analysis was utilized to for the scales. Varimax rotation method was used. Two sub-scales were finalized; (i) Quality and Comfort of health care facilities (ii) wait time and finance. First factor was focused on quality and comfort of health care facilities which includes the quality of medical treatment provided in hospital setup and the comfort and facilities provided by the medical staff. Schuster et al., (1988) illustrates that a good quality of health-care means 'Providing services to patients in a competent and technical manner, shared decisions, good communication and cultural sensitivity. Mosadeghrad (2014) emphasized on the improvement of quality in hospital setups to maintain patient's satisfaction. The factor includes patient's satisfaction with doctor, staff, privacy, instruments, cleanliness doctor's attention and treatment. The second factor comprises wait time and finance which elaborates whether the treatment takes a lot of time or short time to start in an emergency. Biya et al., (2022) worked and explicated that wait time in medical care unit worths a lot. If the wait time is too much in a hospital patient will not look forward for that hospital. Maintaining a appropriate time for wait is recommended to enhance satisfaction level of patients. Exploratory factor analysis was done to extract the factors, factor structure and to finalize the items. Principal component analysis was done with varimax rotation method. The analysis explicated the scale's reliability that the scale is reliable and valid for patients admitted in hospital setup. After exploratory factor analysis confirmatory factor analysis was done with AMOS 22 to confirm the scale's reliability it also illustrated that scale is reliable. Patient satisfaction questionnaire (PSQ-18) was utilized to compare the reliability of the scale (Marshall & Hays, 1994).

Conclusion

It is concluded, that the newly developed indigenous scale can be applied in empirical researches concerning individuals over 30. The scale is valid and reliable for measuring patient's satisfaction. There were some challenges in conducting the scale which were resolved by researcher through literature review. Forthcoming researches can get benefit to collect the data related to patient's satisfaction through this advanced scale. As well as, the currently developed scale aids the hospital administration to estimate the satisfaction level of patients from their working doctors, staff and facilities too.

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