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THE IMPACT OF PHARMACEUTICAL SERVICES QUALITY ON BUILDING A STRONG RELATIONSHIP BETWEEN PHARMACISTS AND THEIR CUSTOMERS

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ABSTRACT: Background: Pharmacy is an important profession in Jordan whereby it plays a vital role in providing the pharmaceutical services required for the health care of patients and it is an effective factor in the economy and development of the nation. Therefore, it is important to focus on the relationship between pharmacists and their customers through providing high quality pharmaceutical services. **Objectives:** The current study aimed at investigating the level of pharmaceutical services quality in Jordan and its effect on building a strong relationship between pharmacists and their customers "from the pharmacists' perspective", through customers' perceived value, satisfaction, loyalty and CRM. **Methods:** This study is a descriptive and analytical one. A self-administered questionnaire was distributed to a convenience sample of 110 pharmacists working in public pharmacies, to measure the impact of pharmaceutical services quality on building relationship with customers. **Results:** There is a statistically significant effect of pharmaceutical services quality on building a strong relationship between pharmacists and their customers at level (α=0.05) from one dimension (Responsiveness). There is a statistically significant effect of pharmaceutical services quality on customers' perceived value, satisfaction and loyalty and there is no statistically significant effect of pharmaceutical services quality on CRM at level (α=0.05). **Conclusion:** Pharmacies sector should focus on the quality of pharmaceutical services provided to customers as a basic standard for building a strong relationship with customers because of the direct impact of these services on customers' perceived value, satisfaction and loyalty.

INTRODUCTION: As a result of globalization, great changes on the economic, technological and cultural developments have been emerged, these changes have affected the competition structure and intensity in the world, and have an impact on many different sectors in Jordan and on pharmacy sector in particular, prompting a lot of pharmacies to develop ways of attracting and retaining customers through gain their loyalty and managing relationships with them.

Thus, we find that the human element is an essential element in the success of the management in pharmacies as it requires high skills and abilities based on scientific and professional basis, through the use of different marketing processes for attracting customers in addition to the quality of services provided by pharmacies to customers, and also the focus on the needs and desires of customers to achieve the desired satisfaction among customers, which leads to their loyalty through the development of programs for managing relationships with customers.

Pharmacy is a very important profession in Jordan whereby it plays a vital role in providing the pharmaceutical services required for the health care of patients and it is an effective factor in the economy and development of the nation.

Public pharmacy is the pharmaceutical facility in which prescriptions are preserved and dispensed to the public for price. For this reason, first author found that it is necessary to focus on the (internal) factors of pharmacies including its tangibles and staff by considering the way to display the pharmaceutical products, providing tools to facilitate customer services, the additions which increase the feeling of psychological comfort thus contributing to the success of the service provided by pharmacies and the development of the internal environment of pharmacies through training and continuing education for workers from scientific aspects in terms of the sale of medicines that do not require a medical prescription (OTC) in addition to the skills of communication with the customers also with the terms of management, technical , and marketing aspects. For everything will contribute, it's build a strong relationship between pharmacies and their customers, participatory providing their needs and meet their desires with safe and secure ways ended with achieving profitable for pharmacies on ethical and scientific basis.

Therefore to gain the satisfaction and the loyalty the customers have, required improving of the quality of services offered to them with relatively taking the perceptions of customers to the properties of the service by building effectively programs to manage relationships with customers and continuous communication with them by documenting their private information of their needs and to provide them with the right time and for the development of safe marketing activities for them with the help of experts, nutrition, and beauty of some pharmaceutical products that do not need medical prescription .

The Jordan Pharmaceutical Association (JPA) [1] was established in 1957. Its objective is to enhance awareness of the profession in addition to regulate the relationship between pharmacists and their customers, in order to raise the level of the quality of pharmaceutical service provided to customers. The term "private sector pharmacist" refers to every Jordanian employee who holds a B.Sc. degree in pharmacy as a minimum qualification, works in independent pharmacies in Jordan, is a member of JPA, and is certified for the pharmacy profession. As the study revolved about the quality of pharmaceutical services, it was necessary to

highlight the concept of service quality, which referred to the following meanings:

Kotler [2], wrote that service quality of a firm is tested at each service encounter: the provider and the receiver, and the essence of this reciprocal process in intangible. According to Wikipedia [3], "SERVQUAL" is a multi-dimensional research instrument, designed to capture consumer expectations and perceptions of a service along the five dimensions that are believed to represent service quality. Also a number of studies were conducted concerning the relationship between pharmacists and their customers and also on the external and internal environments influencing their work. Alhuwitat, Abusalih & Eseid [4] measured the perception of Jordanian pharmacists on attaining their rights, and the impact of these rights on their satisfaction, the results showed that pharmacists were not satisfied. Bernard et al., [5] studied the relationship between Customer Service Quality and Customer Loyalty among Retail Pharmacies in Western Kenya and reported that there is a positive relationship between relationship quality dimensions and Customer loyalty.

Study Objectives: The study aimed at investigating the level of pharmaceutical services quality in Jordan and its impact on building a strong relationship between pharmacists and their customers, and raise awareness between the Jordanian pharmacists on the importance of service quality in the development of the pharmaceutical profession, since pharmacists constitute an important part of society that has a political, social and economic effect in the country and contribute to the renaissance of society as a whole.

Statement of the Problem: Through interviews with members of the JPA working in the private pharmacy sector, the first author, being a member of JPA, had found many important malpractices among pharmacists working at pharmacies sector, such as the lack of care in quality of services provided to customers, as these malpractices influenced the relationship between pharmacists and their customers. As well as, it was concluded that the pharmacies' owners have different views towards the concept pharmaceutical service quality.

Hypothesis:

The Main Hypothesis:

H0: There is no statistically significant effect of pharmaceutical services quality on building a strong relationship between pharmacists and their customers at level (α=0.05) "from the pharmacists' perspective".

The sub-hypothesis emerged from the main hypothesis: H0a: There is no statistically significant effect of pharmaceutical services quality on the customers' perceived value at level (α=0.05). **H0b:** There is no statistically significant effect of pharmaceutical services quality on the customers' satisfaction at level (α=0.05).

H0c: There is no statistically significant effect of pharmaceutical services quality on the customers' loyalty at level (α=0.05).

H0c: There is no statistically significant effect of pharmaceutical services quality on the customers relationship management at level (α=0.05).

FIG. 1: THE STUDY MODEL

Tangibles: the appearance of physical facilities, equipment, furnishings, communication materials, the size of premises, and whether there is a comfortable place for waiting while providing the service.

Courtesy: Politeness, respect, consideration, friendliness, neat appearance.

Trust and Reliability: dependability and accuracy in performing the promised service.

Responsiveness: the employee's willingness and readiness to help customers and provide the required service.

Study Population & Sample: The study population is defined as the pharmaceutical sector located in all areas of Amman governorate, amounted to 1473 pharmacies according to the records of JPA.

The study adopted the convenience sample approach while ensuring the representation of all areas of Amman due to their suitability for achieving the study objectives. Accordingly, 110 questionnaires were distributed, the returned questionnaires were 105, of which 6 questionnaires were invalid, therefore, the study sample consists of 99 pharmacists working at pharmaceutical sector, and who are members of the JPA, representing 90% of the total distributed questionnaires.

Data Collection: To achieve the purpose of the current study represented in investigating the factors affecting building a strong relationship between pharmacists and their customers "from the pharmacists' perspective", the researcher used both primary and secondary sources of data. Secondary data was gathered from the relevant books, documents, journals, internet and the laws and regulations of JPA. A questionnaire was used as a primary source to gather data.

Study Instrument: A questionnaire was designed to examine the factors affecting building a strong relationship between pharmacists and their customers "from the pharmacists' perspective". The questionnaire consists of two parts: first part related to demographic information of the respondents (sex, marital status, educational level, salary, pharmacy type and years of experience). While second part consists of two dimensions: the pharmaceutical services and building relationships with customers.

Validity and Reliability of the Study Instrument: In order to test if the questionnaire measures what it intends to measure, and ensure its reliability, the researcher has used Cronbach's Alpha coefficient, as it is based on the correlations
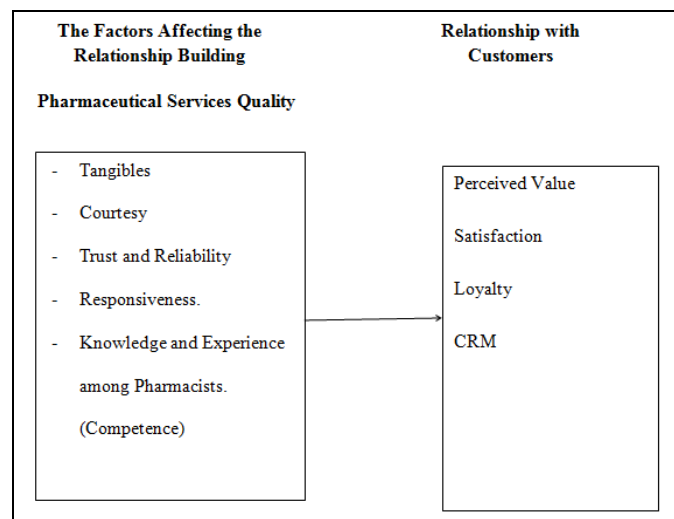
between the individual items that make up the scale, and indicates the strength of consistency between the scale items.

The results show that all variables ranged from 0.621 to 0.866. Thus, the internal consistency of the measures can be considered to be good as the variables are above the cutoff point (0.600).

RESULTS: The collected data were analyzed using SPSS and the results are as follows: Prior to the presentation of the hypothesis testing, some background information to provide a profile of the respondents is warranted. Most respondents were female (66.7%), while 34.4% of them were married. Most had obtained BA degree (89.9%), with a monthly income between 351 - 550 Jordan Dinars (47.5%). As to years of experience, 30.3% are less than two years of experience, 26.3% are working for 2-6 years, 12.1% have 6-10 years of experience, and 31.3% of the respondents are working for more than 10 years of experience. 61.6% of the respondents are working for individual pharmacies and 38.4% are working for chain pharmacies.

The means and standard deviations of the items of the questionnaire according to the dimensions were calculated but are not reported here.

Hypotheses Testing

Main Hypothesis: There is no statistically significant effect of pharmaceutical service quality on building a strong relationship between pharmacists and their customers at level (α=0.05) "from the pharmacists' perspective".

ANOVA for regression and multiple regression analysis have been used to identify the effect of pharmaceutical services on building strong relationship between pharmacists and their customers, as shown in the **Table 1**.

ANOVA for regression was significant at level (α=0.05), since the value of F statistic (14.467) is less than critical F-value (2.65), while the sig. value was (0.000) which is less than the significance level (0.05), which indicates that the regression model seems to be acceptable. Accordingly, the null hypothesis is rejected in favor of the alternative hypothesis that There is a statistically significant effect of pharmaceutical services quality on building a strong relationship between pharmacists and their customers at level (α=0.05) "from the pharmacists' perspective".

A multiple regression test has been used to determine the effect of the independent variables on the dependent variable.

TABLE 1: REGRESSION COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.623	.433		1.439	.153
	Tangibles	.123	.085	.142	1.455	.149
	Courtesy	.147	.089	.162	1.648	.103
	Trust and Reliability	.137	.079	.150	1.738	.086
	Responsiveness	.287	.079	.342	3.624	.000
	Knowledge and Experience among Pharmacists	.094	.085	.107	1.113	.269

R= 0.661, R^2= 0.438 * Significant at level (α=0.05)

Table 1 shows that there is a statistically significant effect of one dimension (Responsiveness) on building a strong relationship between pharmacists and their customers "from the pharmacists' perspective", while the sig. level was (0.000) which is less than (0.05), indicating that it is statistically significant. In addition, the value of (R) was (0.661) while (R^2) interpreted (0.438) of the variance of the dependent variable, representing that (43.8%) of variation in building a strong

relationship between pharmacists and their customers can be interpreted through the variation in pharmaceutical services. Furthermore, the other dimensions do not have a statistical significant effect.

H0a: There is no statistically significant effect of pharmaceutical services quality on the customers' perceived value at level (α=0.05).

ANOVA for regression and multiple regression analysis have been used to identify the effect of pharmaceutical services on the customers' perceived value, as shown in the **Table 2**.

ANOVA for regression was significant at level (α=0.05), since the value of F statistic (11.696) is less than critical F-value (2.65), while the sig. value was (0.000) which is less than the significance level (0.05), which indicates that the regression model seems to be acceptable. Accordingly, the null hypothesis is rejected in favor of the alternative hypothesis that There is a statistically significant effect of pharmaceutical services quality on the customers' perceived value at level (α=0.05). A multiple regression test has been used to determine the effect of all factors of independent variables on the dependent variable.

TABLE 2: REGRESSION COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.459	.547		.840	.403
	Tangibles	.129	.107	.123	1.208	.230
	Courtesy	.122	.113	.111	1.081	.283
	Trust and Reliability	.064	.100	.058	.643	.522
	Responsiveness	.335	.100	.330	3.352	.001
	Knowledge and Experience among Pharmacists	.217	.107	.204	2.022	.046

R= 0.621 R^2=0.385* Significant at level (α=0.05)

The results of **Table 2** indicates that there is a statistically significant effect of two factors pharmaceutical services quality (Responsiveness, Knowledge and Experience among Pharmacists) on the customers' perceived value, while the sig. level were respectively (0.46 & 0.001) which are less than (0.05), indicating that they are statistically significant. In addition, the value of (R) was (0.621) while (R^2) was (0.385), representing that (38.5%) of variation in perceived value can be interpreted through the variation in pharmaceutical services. Furthermore, the other factors do not have a statistical significant effect.

H0b: There is no statistically significant effect of pharmaceutical services quality on the customers' satisfaction at level (α=0.05).

ANOVA for regression and multiple regression analysis have been used to identify the effect of pharmaceutical services on the customers' satisfaction level, as shown in the **Table 3**.

The results indicates that ANOVA for regression was significant at level (α=0.05), since the value of F statistic (6.081) is more than critical F-value (2.65), while the sig. level (0.000) is less than (0.05), which indicates that the regression model seems to be acceptable. Accordingly, the null hypothesis is rejected in favor of the alternative hypothesis that There is a statistically significant effect of pharmaceutical services quality on the customers' satisfaction at level (α=0.05).

TABLE 3: REGRESSION COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.556	.676		.822	.413
	Tangibles	.082	.132	.070	.621	.536
	Courtesy	.175	.140	.143	1.255	.213
	Trust and Reliability	.148	.123	.120	1.203	.232
	Responsiveness	.277	.124	.244	2.239	.028
	Knowledge and Experience among Pharmacists	.118	.132	.100	.894	.374

R= 0.496 R^2= 0.246* Significant at level (α=0.05)

Table 3 shows that there is a statistically significant effect of one factor of pharmaceutical services quality (Responsiveness) on the customers' satisfaction, while the sig. level was (0.028) which

is less than (0.05), indicating that it is statistically significant. In addition, the value of (R) was (0.490) while (R^2) was (0.246), representing that (24.6%) of variation in customers' satisfaction can be interpreted through the variation in pharmaceutical services. Furthermore, there is no statistical significant effect for other factors.

H0c: There is no statistically significant effect of pharmaceutical services quality on the customers' loyalty at level (α=0.05).

ANOVA for regression and multiple regression analysis have been used to identify the effect of pharmaceutical services on the customers' loyalty, as shown in the **Table 4**.

The results shows that ANOVA for regression was significant at level (α=0.05), since the value of F statistic (5.976) is more than critical F-value (2.65), while the sig. level (0.000) is less than (0.05), which indicates that the regression model seems to be acceptable. Accordingly, the null hypothesis is rejected in favor of the alternative hypothesis that There is a statistically significant effect of pharmaceutical services quality on the customers' loyalty at level (α=0.05).

TABLE 4: REGRESSION COEFFICIENTS

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.054	.821		.066	.948
	Tangibles	.170	.161	.120	1.058	.293
	Courtesy	.174	.170	.117	1.023	.309
	Trust and Reliability	.070	.150	.047	.470	.640
	Responsiveness	.367	.150	.267	2.442	.016
	Knowledge and Experience among Pharmacists	.155	.161	.108	.961	.339

R= 0.493 R^2= 0.243* Significant at level (α=0.05)

The results of **Table 4** indicate that there is a statistically significant effect of one factor of pharmaceutical services quality (Responsiveness) on the customers' loyalty, while the sig. level was (0.047) which is less than (0.05), indicating that it is statistically significant. In addition, the value of (R) was (0.493) while (R^2) was (0.243), representing that (24.3%) of variation in customers' loyalty can be interpreted through the variation in pharmaceutical services. Furthermore, there is no statistical significant effect for other factors.

H0c: There is no statistically significant effect of pharmaceutical services quality on the customers relationship management at level (α=0.05).

ANOVA for regression and multiple regression analysis have been used to identify the effect of pharmaceutical services on the CRM, as shown in the **Table 5.**

The results indicate that ANOVA for regression was significant at level (α=0.05), since the value of F statistic (4.704) is more than critical F-value (2.65), while the sig. level (0.001) is less than (0.05), which indicates that the regression model seems to be acceptable. Accordingly, the null hypothesis is rejected in favor of the alternative hypothesis that There is a statistically significant effect of pharmaceutical services quality on the customers relationship management at level (α=0.05).

TABLE 5: REGRESSION COEFFICIENTS

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.422	.570		2.495	.014
	Tangibles	.111	.111	.116	.999	.320
	Courtesy	.118	.118	.117	1.005	.318
	Trust and Reliability	.266	.104	.262	2.556	.012
	Responsiveness	.168	.104	.181	1.614	.110
	Knowledge and Experience among Pharmacists	-.112	.112	-.116	-1.007	.317

R= 0.449 R^2= 0.202* Significant at level (α=0.05)

The results of **Table 5** indicate that there is a statistically significant effect of one factor of the pharmaceutical services quality (Trust and Reliability) on the CRM, while the sig. level was (0.012) which is less than (0.05), indicating that it is statistically significant. In addition, the value of (R) was (0.449) while (R^2) was (0.202), representing that (20.2%) of variation in CRM can be interpreted through the variation in pharmaceutical services. Furthermore, there is no statistical significant effect for other factors.

Study Limitations: The researcher faced many limitations, such as the distribution of a questionnaire on the various areas in Amman. As well as the scarcity of studies conducted on the subject of the study in Jordan. This study was limited to the used instruments, so the sincerity of the findings of the study is determined by the extent of reliability and validity of the instruments.

Study Findings: This is the first study in Jordan on the impact of pharmaceutical service quality on building a strong relationship between pharmacists and their customers. The results of the current study will contribute in the development of pharmaceutical service quality in Jordan and stand on the gabs in order to bridge them.

The most important result found by the researcher through the distribution of questionnaires is the existence of significant differences between individual pharmacies and chain pharmacies in the quality of pharmaceutical services:

- Tangibles, maintaining hygiene and commitment to the pharmaceutical profession dress are better in the chain pharmacies.
- Communication skills and courtesy are better in the individual pharmacies than the chain pharmacies.
- Meet the promises to provide the customers' needs, is higher in the individual pharmacies than in chain pharmacies.
- Responsiveness is higher in the individual pharmacies.
- The individual pharmacies have higher quality in knowledge and experience in matters related to pharmaceutical products and their usages in comparison to chain pharmacies.

- Finally, the lack of attention and laws by the governmental and public institutions that clarifying standards of pharmaceutical service quality in Jordan.

CONCLUSIONS:

- Pharmacies sector should focus on the quality of pharmaceutical services provided to customers as a basic standard for the building of a strong relationship with customers because of the direct impact of these services on customers' perceived value, satisfaction and loyalty.
- Conducting periodic surveys to identify the customers' satisfaction and loyalty in the pharmacies sector for the continuous improvement of the customer satisfaction index.
- Train employees at the pharmacies sector on providing high quality services including their good-looking and readiness to assist customers and work to gain their trust through training employee on good communication skills with customers.
- Developing CRM programs in the pharmacies sector by using information technology and the collection of customers' data and information, and continuous communication with them to meet their needs and requirements, and thus increasing their satisfaction and loyalty.
- Develop a customers' loyalty program in the pharmacies sector, including providing advice over the phone or delivery of their needs to homes in necessary cases.
- Develop a system of complaints and suggestions in pharmacies, which contributes to the development of the profession and helps to build a strong relationship between pharmacists and their customers.
- Finally, governmental and public institutions should pay more attention to the standards of pharmaceutical services quality and should commit pharmacies on applying such standards in order to contribute to the advancement of the pharmaceutical profession in Jordan.

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DECLARATION: The authors warrant that this article is their original work, hasn't received prior publication and is not under consideration for publication elsewhere.

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