Voluntary/Charitable Pharmacy Practice in Saudi Arabia

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ABSTRACT

Objectives: To demonstrate the pharmacist practice of the voluntary or charitable pharmacy in Saudi Arabia. **Materials and Methods:** It analyzes a cross-sectional survey that discussed the Pharmacist practice of voluntary or charitable pharmacies in Saudi Arabia. The survey consisted of respondents' demographic information about pharmacists and Pharmacy charity general practice, the practice of voluntary or charitable in various sectors. The 5-point Likert response scale system was used with closed-ended questions. The survey was validated through the revision of expert reviewers and pilot testing. Besides, various tests of reliability, McDonald's ω, Cronbach alpha, Gutmann's λ2, and Gutmann's λ6, had been done with the study. The data analysis of the Pharmacist practice of charity pharmacies is done through the survey monkey system. Besides, the Statistical Package of Social Sciences (SPSS), Jeffery's Amazing Statistics Program (JASP), and Microsoft Excel sheet version 16. **Results:** A total number of 578 pharmacists responded to the questionnaire. Of them, one-third responded from the Central region (180 (31.14%)), and one Quarter responded from the western region (140 (24.22%)), with statistically significant differences between the provinces (p=0.000). Males responded more than females (373 (64.53%)) versus 205 (35.47%)), with statistically significant differences among gender (p=0.001). Most of the responders were in the age group of 35-44 years (155 (26.82%)), age group 25-34 years (144 (24.91%)), age group 45-54 years (126 (21.80%)), and with statistically significant differences between all age groups (p=0.000). Less than one-half of the responders, Always, 251 (43.65%), or sometimes 130 (22.61%), participated as pharmacy volunteers before, with a statistically significant difference between the responses (p<0.000). Most pharmacists participate in pharmacy volunteer More than once a week, 260 (45.45%), or 129 (22.55%) a few times a year. Most of the responders participated in pharmacy charity for getting paradise 338 (59.61%), Improved their CV 283 (49.91%), and met their attractive 232 (49.91%). The majority of pharmacists prefer to participate as pharmacy volunteers during Disaster period 400 (70.03%), Ramadan time 368 (64.11%), regular days 363 (63.24%), and Hajj period 322 (56.10%). **Conclusion:** The charitable pharmacy practice by pharmacy practitioners was inadequate. The majority of pharmacy providers spend little time annually practicing charitable pharmacy activities and prefer to participate during disasters, the holy month of Ramadan, and the Hajj period. Therefore, awareness of charitable pharmacy practice is essential to improve pharmacy participation in the future.

Keywords: Voluntary, Charitable, Charity, Pharmacy Practice, Pharmacist, Saudi Arabia.

INTRODUCTION

There are various pharmaceutical healthcare providers, such as the government and private sectors.[1] The new section recently introduced pharmaceutical care through charity and voluntary organizations such as pharmacy and medical and healthcare charity societies and organizations.[2-5] Pharmaceutical services have various activities, such as preparing and dispensing medications. Besides, the procurement, storage, and distribution of charity medicines to poor people.[2-5] There various charitable programs suggested to provide pharmacy activities such as Charitable hospital pharmacy, Charitable community pharmacy, Charitable ambulatory care services, Ramadan Pharmaceutical care, Mass gatherings Hajj or Omera pharmaceutical care, Charitable pharmaceutical societies, Charity healthcare societies, Islamic history of pharmacy.[6] Besides, the Prophet medicine, Islamic value in pharmacy and medicine, Disaster medicine and emergency public health, and research in charity pharmaceutical care.[6] Exploring charity pharmacy practice is necessary to set up a strategic plan and find the best possible charity jobs and places. The authors are unaware of any investigation into charity pharmacy practice by a pharmacist or clinical pharmacist locally, in the Gulf, in Arabic countries.[7-15] The current research aims to illustrate the approach of charity performances by pharmacists in Saudi Arabia.

MATERIALS AND METHODS

It analyzes a cross-sectional survey that discussed the Pharmacist practice of voluntary or charitable pharmacy in Saudi Arabia. It self-reported an electronic survey of the pharmacist, including pharmacists from internship to consultant, pharmacist specialties, and Saudi Arabia. All non-pharmacist or students, non-completed, non-qualified surveys will be excluded from the study. The survey consisted of respondents' demographic information about pharmacists and Pharmacy charity general practice(Reasons for participation in charitable pharmacy practice, frequency of participation, preferable period of participation, places of participation, pharmacy specialty participation, and medications ordering

stages involvement), the practice of volunteering in various sectors.[6-15] The 5-point Likert response scale system was used with closed-ended questions. According to the previous litterateur with an unlimited population size, the sample was calculated as a cross-sectional study, with a confidence level of 95% with a z score of 1.96 and a margin of error of 5%, a population percentage of 50%, and drop-out rate 10%. As a result, the sample size will equal 380-420 with a power of study of 80%.[16-18] The response rate required for the calculated sample size is at least 60-70% and above.[18,19] The survey was distributed through social media of WhatsApp and Telegram groups pharmacists. The reminder message had been sent every 1-2 weeks. The survey was validated through the revision of expert reviewers and pilot testing. Besides, various tests of reliability, McDonald's ω, Cronbach alpha, Gutmann's λ2, and Gutmann's λ6, had been done with the study. The data analysis of the Pharmacist practice of charity pharmacy is done through the survey monkey system. Besides, the Statistical Package of Social Sciences (SPSS), Jeffery's Amazing Statistics Program (JASP), and Microsoft Excel sheet version 16. It included a description and frequency analysis, good of fitness analysis, and correlation analysis. Beside, inferential analysis of factors affecting the practice of voluntary or charitable at various sectors with linear regression. The STROBE (Strengthening the Reporting of Observational Studies in Epidemiology Statement: guidelines for reporting observational studies) guided the reporting of the current study.[20,21]

RESULTS

A total number of 578 pharmacists responded to the questionnaire. Of them, one-third responded from the Central region (180 (31.14%)), and one Quarter responded from the western region (140 (24.22%)), with statistically significant differences between the provinces (p=0.000). Most of the responders were from MOH Government Hospital (184 (32.11%)), General Medical Directorate in Region (93 (16.23%)), and Community pharmacy (89 (15.53%)), with a statistically significant difference between working sites (p=0.000). Most responders were Saudi 446 (77.16%), with a statistically significant difference with non-Saudi (p=0.000). Males responded more than females (373 (64.53%)) versus 205 (35.47%)), with statistically significant differences among gender (p=0.001). Most of the responders were in the age group of 35-44 years (155 (26.82%)), age group 25-34 years (144 (24.91%)), age group 45-54 years (126 (21.80%)), and with statistically significant differences between all age groups (p=0.000). Most of the responders held a Bachelor (134 (23.34%)), Doctor of Philosophy (130 (22.65%)), and Master (110 (19.16%)), with statistically significant differences between all levels (p=0.000). Most of the pharmacists were staff pharmacists (235 (40.66%)) and General Managers (125 (21.63%)), with statistically significant differences between all levels (p=0.000). Most pharmacists had a work experience of 6-10 years (225 (39.34%)) and <3 years (114 (19.93%)), with a statistically significant difference between years of experience (p=0.000). There was a strong positive correlation between age (years) and years of experience based on Kendall's tau_b (0.720) and Spearman's rho (0.804) correlation coefficients, with a statistically significant difference between the two factors (p<0.000). There was a medium positive correlation between the site of work and last academic qualifications based on Kendall's tau_b (0.448) and Spearman's rho (0.536), with a statistically significant difference between the two factors (p<0.000). There was a medium positive correlation between gender and nationality based on Kendall's tau_b (0.467) and Spearman's rho (0.467) correlation coefficients, with a statistically significant difference between the two factors (p<0.000). (Tables 1 and 2).

Less than one-half of the responders were Always 251 (43.65%), or sometimes 130 (22.61%), participated as pharmacy volunteers before, with a statistically significant difference between the responses

Table 1: Demographic, social information.

Nationality	Response Count	Response Percent	p-value (X2)
Central area	180	31.14%	0.000
North area	62	10.73%	
South area	104	17.99%	
East area	92	15.92%	
West area	140	24.22%	
Answered question	**578**		
Skipped question	**0**		
Site of work	**Response Count**	**Response Percent**	**p-value (X2)**
Ministry of Health	72	12.57%	0.000
General Medical Directorate in Region	93	16.23%	
MOH government Hospital	184	32.11%	
Non-MOH government sectors (including hospitals)	48	8.38%	
MOH-Primary Care Center	7	1.22%	
Private Hospital	34	5.93%	
Private Primary Care Center	15	2.62%	
Community pharmacy	89	15.53%	
University	17	2.97%	
Unemployment	6	1.05%	
Pharmaceutical companies	6	1.05%	
students	2	0.35%	
Answered question	**573**		
Skipped question	**5**		
Nationality			
Saudi	446	77.16%	0.000
Non-Saudi	132	22.84%	
Answered question	**578**		
Skipped question	**0**		
Gender	**Response Count**	**Response Percent**	
Male	373	64.53%	0.000
Female	205	35.47%	
Answered question	**578**		
Skipped question	**0**		
Age	**Response Count**	**Response Percent**	
18 - 24	95	16.44%	0.000
25 - 34	144	24.91%	
35 - 44	155	26.82%	
45 - 54	126	21.80%	
55 - 64	54	9.34%	
65 - 74	4	0.69%	
75 or older	0	0.00%	
Answered question	**578**		
Skipped question	**0**		

Table 2: Demographic, social information.

Pharmacist Qualifications	Response Count	Response Percent	p-value (X2)
Diploma	73	12.72%	
Bachelor	134	23.34%	
Master	110	19.16%	
Ph.D	130	22.65%	
Residency	69	12.02%	
Fellowship	0	0.00%	
Pharm D	58	10.10%	
Internship	0	0.00%	
Answered question	**574**		
Skipped question	**4**		
Position Held	**Response Count**	**Response Percent**	
General Manager	125	21.63%	0.000
Manager	66	11.42%	
Director	64	11.07%	
Supervisor	79	13.67%	
Staff	235	40.66%	
Deputy Director of Pharmacy	0	0.00%	
Internship	2	0.35%	
Unemployment	7	1.21%	
Answered question	**578**		
Skipped question	**0**		
Years of experience in a pharmacy career	**Response Count**	**Response Percent**	
<3	114	19.93%	0.000
3-5	78	13.64%	
6-10	225	39.34%	
11-15	90	15.73%	
> 15	65	11.36%	
Answered question	**572**		
Skipped question	**6**		

(p<0.000). Most pharmacists participate in pharmacy volunteer More than once a week, 260 (45.45%), or 129 (22.55%) a few times a year. Most of the responders participated in pharmacy charity to get paradise 338 (59.61%), Improve their CV 283 (49.91%), and meet their attractive 232 (49.91%). The majority of pharmacists prefer to participate as pharmacy volunteers during Disaster period 400 (70.03%), Ramadan time 368 (64.11%), regular days 363 (63.24%), and Hajj period 322 (56.10%). (Table 3). The majority of responders prefer to participate as pharmacy volunteers at Governmental pharmacy 398 (69.46%), Pharmacy society 387 (67.54%), and Public institutions 338 (58.99%). Most pharmacists wish to participate with hospital pharmacy 401 (69.86%), community pharmacy 392 (68.29%), and Public health awareness 290 (50.52%). Most pharmacists wish to work as volunteer pharmacists in preparation of medication 375 (65.22%), prescribing of drugs 350 (60.87%), and stocking medications 313 (54.43%) (Table 4). The average score of Project volunteer participants was (3.89). The project from the governmental sector obtained the highest score (4.00), and the University sector (3.94).

Table 3: Pharmacy charity general practice part 1.

Did you participate in pharmacy volunteer before	Response Count	Response Percent	
Always	251	43.65%	0.000
Sometimes	130	22.61%	
Rare	109	18.96%	
No	85	14.78%	
Answered question	**575**		
Skipped question	**3**		
How often do you participate in pharmacy volunteer	**Response Count**	**Response Percent**	
More than once a week	260	45.45%	0.000
Once a month	105	18.36%	
A few times a year	129	22.55%	
Never	78	13.64%	
Answered question	**572**		
Skipped question	**6**		
Why did you participate in pharmacy volunteer	**Response Count**	**Response Percent**	
To get the paradise	338	59.61%	
It is interesting	232	40.92%	
Improve my CV	283	49.91%	
Expand my experience in pharmacy	178	31.57%	
Expand our social network	101	17.81%	
Fill in the pharmacist demand and vacancy	66	11.64%	
Assessment of poor patient	63	11.11%	
It is a fun way to learn and develop my skills	57	10.05%	
Improve pharmacist career	74	13.05%	
Social responsibility toward the community	1	0.18%	
Answered question	**567**		
Skipped question	**11**		
With period do you prefer to participate as a pharmacy volunteer?	**Response Count**	**Response Percent**	
Hajj period	322	56.10%	
Ramadan time	368	64.11%	
Disaster period	400	70.03%	
Regular period	363	63.24%	
During wars	177	30.84%	
Answered question	574		
Skipped question	**4**		
Skipped question	**2**	**36.98%**	

In contrast, the lowest score was obtained for The project from the Pharmacy society or associations (3.85), with a statistically significant difference between the responses (p<0.0001). All aspects of the perception of pharmacists about scientific publications were statistically significant between responses (p<0.000) (Table 5). The score for single-test reliability analysis of McDonald's ω was 0.977, Cronbach's α was

Table 4: Pharmacy charity general practice part 2.

Which places do you prefer to participate as a pharmacy volunteer	Response Count	Response Percent
Public institutions	338	58.99%
Pharmacy society	387	67.54%
Governmental pharmacy	398	69.46%
Private pharmacy	123	21.47%
University Pharmacy	107	18.67%
Manufacturers of medications	63	10.99%
Answered question	**573**	
Skipped question	**5**	
Which type of pharmacy Specialty do you prefer to participate in as a pharmacy volunteer	**Response Count**	**Response Percent**
Public health awareness	290	50.52%
Hospital pharmacy	401	69.86%
Community pharmacy	392	68.29%
University pharmacy-related issues	255	44.43%
Industrial Pharmacy	55	9.58%
Pharmaceutical companies	54	9.41%
Primary healthcare center pharmacy	48	8.36%
Pharmacy conferences and meeting	51	8.89%
Answered question	**574**	
Skipped question	**4**	
Which of the type of medications stages do you prefer to work as a volunteer pharmacist	**Response Count**	**Response Percent**
Procurement management	191	33.22%
Stocking medications	313	54.43%
Prescribing of medications	350	60.87%
Preparation of medications	375	65.22%
Dispensing of medicines	187	32.52%
Monitoring and follow of medications	197	34.26%
Answered question	**575**	
Skipped question	**3**	

0.976, Gutmann's was λ2, 0.977, Gutmann's λ6 was 0.980, and Greater Lower Bound was 0.988 with statistically significant ($p<0.05$).

Factors affecting the type of the charitable pharmacy practice sectors

Factors affecting the practice were analyzed. We adjusted the significant values using the independent samples Kruskal–Wallis test and the Bonferroni correction for multiple tests. Type o charity pharmacy practice sectors includes Location**,** Site of work, **nationality,** Pharmacist gender**,** Age (years), Academic qualifications**,** Years of experience in pharmacy career, Position, Work as a charity pharmacist, and Frequency of Practice as a charity pharmacist. Five locations affected the type o charity pharmacy practice sectors. The eastern region showed the highest scores (2.9443), with statistically significant differences between regions ($p=0.004$). Fourteen worksites affected the type of charity pharmacy practice sectors. The MOH governmental hospitals and general medical directorates in the area obtain the lowest score (1.4356) and (1.7143), respectively, with a statistically significant difference between working sites ($p=0.000$) with significance among all sites. Saudi nationality was the highest score (2.2107) with a statistically significant score and affected the type of charity pharmacy practice sectors ($p=0.002$). The female gender score showed a higher score (2.2088) than the male (2.0559) type o the charity pharmacy practice sectors with a statistically significant difference ($p=0.021$). The age of the responders affected the style of charity pharmacy practice sectors. Pharmacists aged 55-64 and 18-24 showed the lowest score (1.5959) and (1.6206), respectively, with a statistically significant difference between all age groups ($p=0.000$). Six academic qualifications affected the type of charity pharmacy practice sectors. The lowest score (1.1698) and (1.4971) was obtained with residency and diploma degree, respectively, with a statistically significant difference between all levels ($p=0.000$). Five levels of work experience affected the type of charity pharmacy practice sectors, with a statistically significant difference between all levels ($p=0.000$). The lowest score (1.6195) was obtained for those with work experience of 6-10 years, with a statistically significant difference between all levels ($p=0.000$). Seven levels of the position affected the type of the charity pharmacy practice sectors, with the lowest score (1.3318) and (1.9084) obtained for the general manager and staff, respectively, with a statistically significant difference between all levels ($p=0.000$). The pharmacist who always works as a charity pharmacist had the lowest score (1.5088) statistically significant and affected the type o the charity pharmacy practice sectors ($p=0.000$). The pharmacist who worked more than once a week as a charity pharmacist had the lowest score (1.2714) was statistically significant and affected the

Table 5: Type o the charity Pharmacy Practice sectors.

	Complete participation		Incomplete participation		Weak participation		I do not have a participation		I do not need this participation		Total	Weighted Average	p-value (X2)
Governmental sector	50.09%	287	17.80%	102	14.31%	82	17.45%	100	0.35%	2	573	4.00	0.000
Private sector	46.37%	262	18.23%	103	12.39%	70	21.06%	119	1.95%	11	565	3.86	0.000
University sector	48.06%	272	18.90%	107	13.60%	77	17.84%	101	1.59%	9	566	3.94	0.000
General medical or health society	46.19%	261	16.99%	96	18.41%	104	16.99%	96	1.42%	8	565	3.90	0.000
Pharmacy societies or associations	46.55%	263	16.64%	94	12.74%	72	23.01%	130	1.06%	6	565	3.85	0.000
Public institutions	45.65%	257	16.34%	92	18.47%	104	17.41%	98	2.13%	12	563	3.86	0.000
Pharmacy manufacturers	45.21%	255	20.39%	115	12.41%	70	19.50%	110	2.48%	14	564	3.86	0.000
Answered											**573**		
Skipped											**5**		

Table 6: Multiple regression of Factors with the type o the charity Pharmacy Practice sectors.

Model						Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		R	R Square	F	Sig.	B	Std. Error	Beta			Upper Bound	Lower Bound	Tolerance	VIF
1	(Constant)	.809[b]	.655	103.536	.000[b]	−.433	.180		−2.404	.017	−.787	−.079		
	Location					.035	.021	.048	1.691	.091	−.006	.077	.776	1.288
	Site of work					.115	.013	.262	8.864	.000	.089	.140	.726	1.377
	Nationality					−.137	.096	−.050	−1.430	.153	−.325	.051	.509	1.963
	Pharmacist gender					.284	.075	.118	3.771	.000	.136	.432	.649	1.541
	Age (years)					−.240	.042	−.257	−5.690	.000	−.322	−.157	.311	3.215
	Academic qualifications					.015	.020	.023	.747	.455	−.025	.055	.696	1.437
	Years of experience in a pharmacy career					.343	.041	.368	8.391	.000	.262	.423	.330	3.033
	Position Held					−.049	.020	−.072	−2.448	.015	−.088	−.010	.736	1.359
	Work as a charity pharmacist					.157	.041	.151	3.862	.000	.077	.237	.416	2.406
	Frequency of Practice as a charity pharmacist					.613	.041	.589	14.924	.000	.532	.693	.406	2.463

a. Dependent Variable: Type of the charity Pharmacy Practice sectors, Predictors: (Constant), Location, Age (years), Pharmacist gender, Position Held, Years of Experience at pharmacy career, Work as a charity pharmacist, and Frequency of Practice as a charity pharmacist.

Bootstrap for Coefficients

Model		Bootstrap[a]					
		B	Bias	Std. Error	Sig. (2–tailed)	95% Confidence Interval	
						Lower	Upper
1	(Constant)	−.433	−.004	.164	.013	−.780	−.126
	Location	.035	.001	.022	.109	−.006	.080
	Site of work	.115	.001	.015	.001	.086	.146
	Nationality	−.137	.004	.109	.208	−.354	.088
	Pharmacist gender	.284	−.001	.095	.004	.099	.467
	Age (years)	−.240	−.004	.044	.001	−.331	−.159
	Academic qualifications	.015	−.001	.024	.498	−.034	.062
	Years of experience in a pharmacy career	.343	.003	.049	.001	.259	.446
	Position Held	−.049	.000	.023	.039	−.093	−.002
	Work as a charity pharmacist	.157	−.001	.044	.001	.072	.244
	Frequency of Practice as a charity pharmacist	.613	.001	.049	.001	.516	.709

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

type of charity pharmacy practice sector (p=0.000). (Table 6).

The relationship between the charity pharmacy practice sectors and factors such as location, worksite, nationality, gender, age (years), academic qualifications, years of experience, position held in a pharmacy career, work as a charity pharmacist, and Frequency of Practice as a charity pharmacist. The multiple regression analysis considered perception as the dependent variable and factors affecting it as an expletory variable. There was a strong relationship (R=0.809 with p=0.000) between the charity pharmacy practice sector and its factors. Three out of ten (location, nationality, and academic qualifications) were non-significant differences (p>0.05). However, multiple regression analysis confirmed that five factors (i.e., worksite, gender, years of experience, work as a charity pharmacist, and Frequency of Practice as a charity pharmacist) explained 26.2%, 11.8%, 36.8%, 15.1%, and 58.9% respectively of the positive relationship to the variation in perception, with a statistically significant difference (p=0.000), (p=0.000), (p=0.000), (p=0.000), and (p=0.000). Besides, two factors (i.e., age and position) explained 25.7% and 7.2% respectively of the negative relationship to the variation in practice, with a statistically significant difference (p=0.015) and (p=0.000). The bootstrap model was also confirmed. Furthermore, the relationship was verified by the non-existence of multicollinearity with the worksite, gender, position held in a pharmacy career, work as a charity pharmacist, and Frequency of Practice as charity pharmacist factors with a Variance Inflation Factor (VIF) of 1.377, 1.541, 1.359, 2.406 and 2.463 respectively; which less than three or five as a sufficient number of VIF. However, age and experience factors had 3.215 and 3.033, respectively, which showed the existence of multicollinearity.[22-24] (Table 6).

DISCUSSION

The pharmacists work at different sections, including hospitals, regulatory affairs and drug registration, community pharmacies, and pharmaceutical companies at scientific offices or inside the manufacturing process. The most charitable pharmacy practices were hospital and community pharmacies overseas.[7,9-11,14] However, most charitable pharmacies practice locally as hospital pharmacists or clinical pharmacists at healthcare facilities.[5,6,25] The Ministry of Health encourages all healthcare providers, including pharmacists, to participate in charitable or voluntary works and performance at healthcare institutions.[5] They issued certificates and awards annually for those who participated for specific hours.[5] Explored the types of charitable pharmacy participants, the working site's preferred frequency, specific period, and kind of pharmacy practice are fundamental to understanding pharmacists' behavior. To provide the best utilization of pharmacists in charitable activities and plan charitable pharmacy practices. Thus, the current cross-sectional approach with various locations, working sites, different ages, gender, multiple experiences, and positions. That's reflected in the pharmacy society, similar to previous studies.[9,10,14]

The findings showed that one-half of responders participate in voluntary pharmacy jobs once a week or a few times annually. That's reflected in inadequate charitable pharmacy participation by the pharmacist, and they need more awareness for beneficiaries of voluntary works in pharmacy practice and health care services. Most pharmacists participate to get paradise, improve their curriculum vitae, or meet their attractiveness. That's anticipated because some they're doing the job for charitable purposes, and others need to enhance their CV during admission to new job opportunities in pharmacy practice. Most pharmacists prefer to share in the activities of the charitable pharmaceutical during disasters or pandemics, Ramadan or Hajj to satisfy their behaviors and get more benefits of paradise on the last day. Other pharmacists participate on regular days because they are more accessible than on other days or might be during their vacation.

Most pharmacists prefer participating in the governmental sector, pharmacy societies, and public institutions. Most pharmacists wish to participate at governmental hospital pharmacies, community pharmacies, or public institutions. The government, charitable societies, and the public sector had a system for participation, while the community pharmacies did not have a strategy for charitable pharmacy works. Most pharmacists wish to prepare and dispense or prescribe or stoke management of medications as an actual pharmacy practice similar to previous studies.[10,14] Those activities are found at the hospital and sometimes available at charitable societies. However, it isn't easy to find at community pharmacies because most are non-charitable. Moreover, most charitable institutions not involved the pharmacist in regular dispensing work. The pharmacist might work administrative jobs only, discouraging the pharmacist from participating in philanthropic activities. There some suggestions for new charitable pharmaceutical care projects might be started with charitable societies or organizations, as explored in Table 7 with demonstrated cost demand, implementations status, and impact of patients and charitable healthcare sectors. Thus, there is no previous investigation to compare with the current findings.

The average of volunteer project participants was acceptable. Most participants wish to work with government and university sectors because they might be very organized in project management. In contrast, they were not working on new projects at pharmacy societies that were not

Table 7: New Charity pharmacy project and activities.

No	Project	Costly	Easy to implement	Impact
1	Get a discount on medication prices from the manufacture	No	Yes	High
2	Get a discount on medications from health insurance companies' coverage	No	Yes	High
3	Collect the short expired medications from healthcare organizations	No	Yes	High
4	Collect the short expired medication from manufacturers	No	Yes	High
5	Provide medication counseling for low-income and Follow up on the adherence	No	Yes	Moderate
6	Recycle the non-used home medication	No	Yes	Low
7	Participate and Publish charity pharmaceutical care research	No	Yes	Moderate
8	Established the charity community pharmacy	Yes	No	High
9	Established the charity drugstore	Yes	No	High
10	Prepare and dispense medications from non-profit or charity pharmacy	No	Yes	High
11	Implement charity medication utilization evaluation	No	Yes	High
12	Established charity drug information services at a charity healthcare society and organizations	No	Yes	Moderate
13	Home delivery or mail for charity medications	Yes	Yes	High

preferred to the pharmacist related to un-available project management administration. Thus, there is no previous investigation to compare with the current findings. Various factors might affect the type of charitable pharmacy practice. Such as the location with the highest practice score was the eastern area, which might be related to the high pharmacist participating in the charitable practice, emphasizing the new project management. The MOH hospital and medical affairs had the lowest score, which might be related to not having new volunteer projects. Most of the new project management is done by the staff pharmacist. Other regular projects such preparation and dispensing of medication. The nationality factors might affect the participation in the type of charitable pharmacy sector with high scores with Saudi nationality because they are aware of vulnerable individual's jobs, and the government sector encourages involvement in philanthropic activities in the pharmacy practice. Females participate more in the new charitable performance project because they might be more involved in the vulnerable work than males. Age is another factor that might affect participation in the new philanthropic project. Such young and older adults had the lowest involvement because the young pharmacist might not be aware of charitable work, and senior pharmacists are busy with administration issues. Academic qualifications might affect the pharmacist's participation in new philanthropic projects such pharmacy technicians and residents had the lowest involvement because the pharmacy technician was unaware of the new project or the project needed higher qualifications in charitable work. In contrast, the resident might be busy with residency work, performance education, and training. The experience affects the pharmacist's participation in charitable work, with 6-10 years of experience having the lowest participation related to inadequate knowledge and practice of charitable activities. The pharmacist position might affect the pharmacist's involvement in charitable activities of the new project with more deficient general managers and pharmacy staff because both might be busy with regular pharmacy work or administrative pharmacy practice. In contrast, pharmacy interns had high involvement and participation because they had enough time and were aware of new regulations of charitable activities in the pharmacy practice. The pharmacist who consistently participated in the charitable activities was not involved in the new project. The pharmacist working once a week had the lowest participation in the vulnerable jobs because might the unique project needs more attention of practice than regular charitable activities. The most dependable factors that positively affected the participants in the new project were working sites, gender, experience, the approach of charitable work, and frequency of work, as discussed before. In contrast, age and position might negatively affect participation in new projects, as demonstrated earlier. Thus, there is no previous investigation to compare with the current findings

Limitations

Despite the comprehensive information about charitable pharmaceutical care by pharmacy practitioners, it assumed the first study had been done locally and overall in Arabic counties, appropriate sample size, and high-reliability results. However, it contained various limitations, such as using convenience sampling techniques that were not randomized, which included unequal demographic variables. Therefore, future studies are needed with randomized sampling methods with equal variables to detect the prevalence approach.

CONCLUSION

The charitable pharmacy practice in Saudi Arabia was insufficient. Almost one-half of the responders did not participate in philanthropic activities. Those who participated spent little time in a week or a year. The pharmacy profession is involved in getting paradise and improving their Curriculum vitae. Most share during disasters, Ramadan, and Hajj and prefer participating in government pharmacy sectors. Various factors might affect participation. Such female pharmacists participate more than males, middle age pharmacists are more shared, and new graduates are more involved in charitable activities. Companion awareness programs about charitable activities in pharmacy practice are highly recommended to improve pharmacy professions in charitable activities and non-profit work in Saudi Arabia.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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Consent for Publications

Informed consent was obtained from all the participants

Ethical Approval

This research was exempted from research and ethical committee or an Institutional Review Board (IRB) approval.
https://www.hhs.gov/ohrp/regulations-and-policy/decision-charts-2018/index.html

ABBREVIATIONS

MOH: Ministry of Health; **KSA:** Kingdom of Saudi Arabia; **SPSS:** Statistical Package of Social Sciences; **JASP:** Jeffery's Amazing Statistics Program; **STROBE:** Strengthening the reporting of observational studies in epidemiology statement; **VIF:** Variance Inflation Factor; **CV:** Curriculum vitae.

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