Journal of Pharmacy Practice and Community Medicine.2018, 4(1s):S73-S78 • http://dx.doi.org/10.5530/jppcm.2018.1s.24

Abstract

e-ISSN: 2455-3255

National Survey of Pharmacy Leadership at Ministry of Health in Saudi Arabia: Practice Management

Yousef Ahmed Alomi^{*1}, Modhi Abdulmohsen Albaz², Wejdan Fawzan AlMuhraj², Mashael Yasser AlKharji², Norah Rushud Alshuraym²

¹The Past General Manager of General Administration of Pharmaceutical Care and Head, National Clinical pharmacy, and pharmacy practice and Pharmacy R and D Administration, Ministry of Health, Riyadh, KSA. ²Clinical Pharmacy Staff, General Administration of Pharmaceutical Care, Ministry of Health, Riyadh 11392, SAUDI ARABIA.

Received: 13 December 2017; Accepted: 28 February 2018

*Correspondence to:

Dr. Yousef Ahmed Alomi, The Past General Manager of General Administration of Pharmaceutical Care Head, National Clinical pharmacy, and pharmacy practice Head, Pharmacy R and D Administration Ministry of Health, P.O.BOX 100, Riyadh 11392, Riyadh, SAUDI ARABIA. Riyadh, Saudi Arabia. Email: yalomi@gmail.com

Copyright: © the author(s),publisher and licensee Indian Academy of Pharmacists. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. Objective: To explore the national survey of pharmacy leadership at the Ministry of Health with emphasis on pharmacy practice. Methods: It is a ninety days cross-sectional national survey of pharmacy leadership practice at MOH hospitals. The survey modified from self-assessment of 360 leadership and with pharmacy leadership literature. It consisted of a demographic section, leadership pathway, and fifty-three leadership questions. It contained selected eighteen leadership skills of 360 leadership self-assessment. The leadership skills included Achievement, Goals, Flexibility, Feedback, Excellence, Empowering Others, Emotional Intelligence, Decision Making, Developing Others, Cultural Awareness, Continual Improvement, Communication Skills, Coworker Development, Leading the Change Needed, Attitude, Analytical, Administrative Skill, and Action. This survey distributed to all leadership at MOH hospital pharmacies in Kingdom of Saudi Arabia. All analysis is done through the survey monkey system. The survey divided into for several parts for analysis, and discussion. Part one: practice management, part two: planning and organizations, part three: communications strategies, part four: problem-solving and decision making, part five: performances management, part six; working environment, and part seven: professional development. The study explored the part number one; National Survey of Pharmacy leadership: practice management. Results: The survey distributed to one hundred hospitals, the response rate, was forty-two hospitals (42%) with seventy-pharmacy leaders. The gender distribution of responders was Male 43 (63.24%) and female 25 (36.76%) while the nationality was Saudi 69 (98.57%) and non-Saudi 1 (1.43%). The average score Aspects before handling the position was 2.45 (49%) with the highest score was received pharmacy administration orientation 2.57 (51.4%), and the lowest score was received pharmacy administration training courses before handling the positions 2.29 (45.8%). The most sources of gaining skills in pharmacy leadership were life experiences 51 (72.86%) and on job training 29 (41.43%). The average score of administration skills that had pharmacy leaders was 3.63 (72.6%) with the highest score of Communication skills 4.15 (83%), and the lowest score of administration skills was Marketing skills 2.62 (52.4%). Most of the pharmacy leaders had is no incremental of the salary of current positions 44 (67.69%), and most of them got 1-5% only if existed. The majority of pharmacy leaders 29 (43.28%) planned to quit the current position. Conclusion: The pharmacy leadership had low satisfaction at a healthcare organization in Saudi Arabia. Targeting of established very comprehensive leadership program with an emphasis on pharmacy leadership is a requirement for Ministry of Health institutions leads to improve the pharmacy services offered to the patients.

Key word: Pharmacy leadership, Practice management, Ministry of health, Saudi arabia.

INTRODUCTION

The essential core of pharmaceutical care is a pharmacist. The group of pharmacists needs a leader to implement the services inside the healthcare organization. The American Society of Health-System Pharmacist and other pharmacy organizations released several publications in pharmacy leadership.^[1-7] Also, the ASHP had several programs of pharmacy leadership including courses or residency programs. The general administration of pharmaceutical care released several program and services of pharmacy administration that's support pharmacy leaders in their practice.^[8] It included but not limited to the following: pharmacist job satisfaction, Pharmacy staff requirements standard for hospitals and primary healthcare centers, hospital and primary care center pharmacist competency, and patient satisfaction

with pharmacy services.^[9-12] Also, the pharmacy administration conducted several courses of pharmacy administration skills and leadership skills for the pharmacist. Several publications discussed leadership in pharmacy practice as general and pharmacy administration.^[13-17] Others studies conducted to measure the level and status of pharmacy leadership in several counties.^[18-23] Most of the studies focused pharmacy leadership with students or trainees, but the investigation with pharmacist practitioner were few.^[24-27] Also, t is desperate to find investigation inside Saudi Arabia or Gulf and Middle East counties about pharmacy leadership or studies utilized 360-self assessment measurement. The objective of the study to explore the national survey of pharmacy leadership with the emphasis on practice management.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License

METHODS

It is a ninety days cross-sectional national survey of pharmacy leadership practice at MOH hospitals. The survey modified from self-assessment of 360 leadership and with pharmacy leadership literature. It consisted of a demographic section, leadership pathway, and fifty-three leadership questions. It contained selected eighteen leadership skills of 360 leadership self-assessment.^[28] Of The leadership skills included Achievement, Goals, Flexibility, Feedback, Excellence, Empowering Others, Emotional Intelligence, Decision Making, Developing Others, Cultural Awareness, Continual Improvement, Communication Skills, Coworker Development, Leading the Change Needed, Attitude, Analytical, Administrative Skill, and Action. The questions consisted of open and closed questions. The 5-points or 3-point Likert response scale system used. This survey distributed to all leadership at MOH hospital pharmacies in Kingdom of Saudi Arabia. It included general director of pharmacy at MOH and regions, the directors of pharmacy and supervisor at MOH hospital pharmacies. The electronic format of the survey through the survey monkey system and distributed through emails. A reminder e-mail containing a link to the website forwarded two weeks after. All analysis is done through the survey monkey system. The survey divided into for several parts for analysis, and discussion. Part one: practice management, part two: planning and organizations, part three: communications strategies, part four: problem-solving and decision making,

Table 1: Demographic information of pharmacy leaders.							
Gender	Response N	Response %	Complete pharmacy residency	Response N	Response %		
Male	43	63.24%	Yes	10	14.93%		
Female	25	36.76%	No	57	85.07%		
Answered question	68		Answered question	67			
Skipped question	2		Skipped question	3			
Nationality	Response N	Response %	Do you have Board of Pharmaceutical Specialty	Response N	Response %		
Saudi	69	98.57%	Board Certified Ambulatory Care Pharmacist	1	1.54%		
Non- Saudi	1	1.43%	Board Certified Critical Care Pharmacist	1	1.54%		
Answered question	70		Board Certified Pharmacotherapy Specialists	2	3.08%		
Skipped question	0		Non	62	95.38%		
Academic Qualification	on (s		Answered question	65			
18 to 24	0	0.00%	Skipped question	5			
25 to 34	30	44.12%	Total years of current position	Response N	Response %		
35 to 44	26	38.24%	General Manager of Pharmaceutical care	5	7.58%		
45 to 54	10	14.71%	Manager of Pharmaceutical care at region	1	1.52%		
55 to 64	1	1.47%	Director of Hospital pharmacy	24	36.36%		
65 to 74	1	1.47%	Supervisor of pharmacy units	33	50.00%		
75 or older	0	0.00%	Director of Primary care center pharmacy	3	4.55%		
Answered question	68		Answered question	66			
Skipped question	2		Skipped question	4			
Academic Qualifica	tion (s		Total years worked as a Pharmacist	Response N	Response %		
Diploma Pharmacy	7	10.29%	<3	9	13.24%		
Bsc. Pharm	44	64.71%	3-5	13	19.12%		
M.S	9	13.24%	6-10	13	19.12%		
Msc. Clinical Pharmacy	4	5.88%	11-15	14	20.59%		
Pharm.D.	11	16.18%	> 15	19	27.94%		
Ph.D	0	0.00%	Answered question	68			
MBA	4	5.88%	Skipped question	2			
Pharmacy Residency (R1)	2	2.94%	Years of experience in administrative work	Response N	Response %		
Pharmacy Residency (R2)	2	2.94%	Less than one year	10	14.29%		
Fellowship	1	1.47%	1 - 3 years	18	25.71%		
Other (please specify)	6	8.82%	4 - 5 years	13	18.57%		
Answered question	68		6-10	14	20.00%		
Skipped question	2		More than ten years	15	21.43%		
			Answered question	70	14.29%		
			Skipped question	0			

part five: performances management, part six; working environment, and part seven: professional development. The study explored the part number one; National Survey of Pharmacy leadership: practice management

RESULTS

The survey distributed to one hundred hospitals, the response rate, was forty-two hospitals (42%) with seventy-pharmacy leaders. The majority of the hospital bed size (200-299) was 16 (24.24%) followed by nine (13.64%) bed size (300-399) and eight (12.12%) more than bed size (= or > 600). The number of hospitals accredited by the Saudi Central Board of Hospitals Accreditation (CIBAHI) was 36 (76.60%) while 22 hospitals (46.81%) accredited by USA International Joint Commission and CIBAHI and 11 (23.40%) accredited by the Saudi Commission of Healthcare specialties. The gender distribution of responders was Male 43 (63.24%) and female 25 (36.76%) while the nationality was Saudi 69 (98.57%) and non-Saudi 1 (1.43%). The majority of responders were in the age range (25-34) years 30 (55.12%) and (35-44 years) 26 (38.24%). The academic qualifications

Table 2: Demographic hospital information.								
Number of beds at hospital	Response N	Response %						
<50	6	9.09%						
50-99	5	7.58%						
100-199	7	10.61%						
200-299	16	24.24%						
300-399	9	13.64%						
400-599	4	6.06%						
More than or equal 600	8	12.12%						
Medical City	7	10.61%						
Regional Drug Information Centers at (General Health Affairs Directorate)	4	6.06%						
Answered question: 70 and skipped : 0								
The hospital accreditation	Response Count	Response Percent						
CIBAHI	36	76.60%						
Saudi Commission of Healthcare specialties	11	23.40%						
JCI	22	46.81%						
Canada	2	4.26%						
ASHP	0	0.0%						
ACCP	1	5.0%						
Non	4	20.0%						
Answered question: 47 and skipped question	n 23							

Table 4: The sources of gaining skills in pharmacy leadership.

Answer Choices	Response N	Response %
Life Experiences	51	72.86%
Administration Short course 1-5 days	22	31.43%
Administration long training 1-3 months	9	12.86%
Master of Business Administration (MBA)	5	7.14%
On Job training	29	41.43%
Leadership in professional organization	10	14.29%
Residency program	4	5.71%
Other (please specify)	5	

of responders were BSc. Pharm 44 (64.71%) followed by Mater degree 9 (13.24%) and Diploma Pharmacy 7 (10.29%). Of those only 10 (14.93%) completed a residency program in pharmacy administrations and four (4.16%) had completed board of pharmaceutical specialties. The majority of responders worked as a supervisor of the unit at hospital pharmacy 33 (50%) or director of pharmacy 24 (36.36%). Of those they had experiences as pharmacist more than ten years 33 (47.14%) and had administrative work one to three years' experience 18 (25.71%) and more than ten years were 15 (21.43%) as explored in Table 1 and Table 2. The average score Aspects before handling the position was 2.45 (49%) with the highest score was received pharmacy administration orientation 2.57 (51.4%), and the lowest score was received pharmacy administration training courses before handling the positions 2.29 (45.8%) as explored in Table 3. The most sources of gaining skills in pharmacy leadership were life experiences 51 (72.86%) and on job training 29 (41.43%), as explores in Table 4. The average score of administration skills that had pharmacy leaders was 3.63 (72.6%) with the highest score of Communication skills 4.15 (83%), and the lowest score of administration skills was Marketing skills 2.62 (52.4%) as explores in Table 5. The most advantages of pharmacy leadership position were no night shift 29 (41.43%) and nothing-useful 21 (30.00%) while the most disadvantaged of pharmacy leadership position were High workload 42 (60%) and significant responsibility without benefit 37 (52.86%) as explored in Table 6. Most of the pharmacy leaders had is no incremental of the salary of current positions 44 (67.69%), and most of them got 1-5% only if existed. The majority of pharmacy leaders 29 (43.28%) planned to quit the current position as explored in Table 7.

DISCUSSIONS

The Ministry of Health started the last strategic health care plan in 2010 with several achievements.^[29] During that period, the Minister of Health had an annual regular meeting of healthcare leadership. The Minister led the meeting, and each leader deviled presentation related to their specialty and

Table 3: Aspects of handling the position.												
Answer Options	5		5 4		3		2		1		Average	Response N
Did you receive any pharmacy administration courses or training before handing your position	10	14.49%	7	10.14%	8	11.59%	11	15.94%	33	47.83%	2.29	69
Did you receive any general management courses or training before handing your position	10	14.49%	4	5.80%	12	17.39%	15	21.74%	28	40.58%	2.43	69
Did you receive any orientation pharmacy administration before handling your position	13	18.57%	10	14.29%	8	11.43%	14	20.00%	25	35.71%	2.57	70
Did you receive any inducement from previous manager or supervisor during handling your position	12	17.14%	8	11.43%	9	12.86%	16	22.86%	25	35.71%	2.53	70
answered question 70 and skipped 0												
1 All 0% completed 2: All 25% completed 3: All 50% completed 4: All 750% completed 5: All 100% completed												

Journal of Pharmacy Practice and Community Medicine Vol. 4 • Issue 1 (Special Issue) • Jan-Mar 2018 • www.jppcm.org

Pharmacy leadership and practice management

Answer Options		5		4		3		2	1		Average	Response N
Strategic planning	11	16.67%	26	39.39%	23	34.85%	3	4.55%	3	4.55%	3.59	66
Executive planning	9	13.64%	25	37.88%	18	27.27%	11	16.67%	3	4.55%	3.39	66
Interview skills	5	7.58%	33	50.00%	16	24.24%	7	10.61%	5	7.58%	3.39	66
Presentation skills	10	15.15%	31	46.97%	17	25.76%	7	10.61%	1	1.52%	3.64	66
Leadership skills	17	25.76%	30	45.45%	15	22.73%	2	3.03%	2	3.03%	3.88	66
Communication skills	25	37.88%	31	46.97%	7	10.61%	1	1.52%	2	3.03%	4.15	66
Marketing skills	5	7.69%	10	15.38%	18	27.69%	19	29.23%	13	20.00%	2.62	65
Negotiating skills	8	12.12%	23	34.85%	20	30.30%	9	13.64%	6	9.09%	3.27	66
Meetings skills	14	21.54%	31	47.69%	13	20.00%	4	6.15%	3	4.62%	3.75	65
Time management	7	10.77%	36	55.38%	17	26.15%	3	4.62%	2	3.08%	3.66	65
Decision Making skills	15	23.44%	32	50.00%	13	20.31%	2	3.13%	2	3.13%	3.88	64
Problems solving silks	19	28.79%	35	53.03%	6	9.09%	3	4.55%	3	4.55%	3.97	66
Team building skills	19	28.79%	35	53.03%	9	13.64%	0	0.00%	3	4.55%	4.02	66
Innovation skills	9	13.85%	31	47.69%	19	29.23%	3	4.62%	3	4.62%	3.62	65
answered the question 66 and skipped question 4												
1: All 0% completed, 2: All 25% completed, 3: All 50% completed, 4: All 750% completed, 5: All 100% completed												

Table 6: The advantages of curr position	ent pharmacy	leadership	The disadvantages of pharmacy leadership. position					
Answer Choices	Response N	Response %	Answer Choices	Response N	Response %			
Increment salary	15	21.43%	Big responsibility without benefit	37	52.86%			
Free administration courses	12	17.14%	High workload	42	60.00%			
Free pharmacy training courses	10	14.29%	High accountability	21	30.00%			
No night shift	29	41.43%	No increment of Salary	27	38.57%			
Free inside pharmacy conference	7	10.00%	No free pharmacy training courses	18	25.71%			
Free outside pharmacy conference	5	7.14%	No free administration training courses	20	28.57%			
Nothing	21	30.00%	No free pharmacy conferences	18	25.71%			
Other (please specify)	7		Nothing	4				

discussed with all leaders. The General administration of pharmaceutical care leaders at that time attended with them and delivered two presentations in two series years. The healthcare leadership meeting trains all leaders in healthcare management and communications strategies. The director of pharmacy administration had regular meetings with twenty-pharmacy leadership as directors of pharmacy services at regions. In the meeting, the pharmacy strategic plan discussed and approved, and each director deliver updated the meeting members about pharmacy performance in the region and the level of implementation of the pharmacy strategic plan and their problems and suggestions to solve them. The meeting as part of education and training proposes in addition to complete the work. The General administration of education and training development delivered several courses about leadership, including 360-degree self-assessment. The investigator tried to implement 360 tools for pharmacy leadership to explore the strength and weakness of pharmacy leaders at MOH hospitals and administration. The finding showed two third of the pharmacy leaders were male gender with most them Saudi this normal result because the most of our society accept the male leaders than a female one. That almost resembles what reported by Pollard, SR et al., and White, SJ et al.[19-20] Also, the number of pharmacies had a residency program lower than what report by Pollard, SR et al., and White, SJ et al.[19-20] that is due the pharmacy program had an insufficient position and few number of programs in Saudi Arabia. Most of the leaders in young age with most of them had a bachelor's degree and seldom finding residency training the finding expected because of our college of pharmacy graduated were bachelor pharmacy but nor most them converted to Pharm D degree. The age of Saudi leaders younger than what reported by Pollard, SR et al., and White, SJ et al. [19-20] Because the number of pharmacists lower than what is in the USA and the time to be pharmacy leader is speedy. Most of the leaders had from 1-5 years of pharmacy administration that is the pharmacy practice development. That resembles what reported by Pollard et al., the old study while is lower than and White, SJ et al.[19-20] That is related to time more in the USA more time to spend in the pharmacy leadership position. The finding of aspect before handling the leader position shower very low, for instance, less than the pharmacist did not receive pharmacy administration courses or training program before stated with position, or even general management education courses. Also, half of the leaders did not take any orientation program while handing the position, or they did not receive an endorsement from the previous manager

Pharmacy leadership and practice management

Table 7: The incremental salary by current position							
	Response N	Response %					
Yes	21	32.31%					
No	44	67.69%					
Answered:65 and skipped 5							
The percentages incremental of salary of current position							
1-5 % of salary	11	15.71%					
6-10 % of salary	6	8.57%					
11-15 % of salary	2	2.86%					
16-20 % of salary	4	5.71%					
> 20 % of salary	2	2.86%					
Nothing	45	64.29%					
Other (please specify)	3	15.71%					
Answered	70						
Skipped	0						
Are you planning to change or	quit from your cu	irrent position					
Yes	29	43.28%					
No	14	20.90%					
I did not decide yet	24	35.82%					
Answered: 67 and skipped questions: 3							

or leader. Those factors are significant to start or complete the pharmacy work may lead the repetition of the work, starting from zero points, and loss of the time. Those factors absent because the MOH does not have the leadership performance organization including Pharmacy leadership. The results are difficult to compare with it most of the investigation not reported like those aspects. Most of the leaders gained the skills of leadership from life experience not organized manner; the results are higher than that reported by Pollard, SR et. al.^[19] In the USA, there are many of systemic and organized pharmacy leadership programs than in our country, and most of the leaders gained the pharmacy leadership through their practice life. Thus, that is leading to a lot of changes and resistance during the implementation of any new program in the pharmacy practice. Also, many discrepancies with the management of pharmacy staff. Most of the pharmacy leaders missed the marketing skills and negotiating skills that have reflected the pharmacist position not appropriate in the healthcare MOH hospital or organization. The one-third responders stated there no advantage of handing leader in the pharmacy practice with more half of them had the significant advantages the big responsibility with a high workload. Also, two third of them do have incremental in the salary. Those entire factors lead the pharmacist not to be leaders with a one-fifth wish to change or quit the position, and one third did not decide that. That reflected very badly of pharmacy leadership in the current situation. The complete revised of pharmacy leadership with the regular survey is highly recommended.

CONCLUSIONS

The pharmacy leadership is an appropriate situation in Ministry of Health organizations in the Kingdom of Saudi Arabia. The education and training were inadequate for pharmacy leaders. Most of the leadership position had many disadvantages with low advantages and the majority of pharmacist wish to change their position or quit the job at healthcare organizations in the Kingdom of Saudi Arabia.

ACKNOWLEDGEMENT

None

CONFLICT OF INTEREST

None

SOURCE OF SUPPORT

None

ABBREVIATION USED

KSA: Kingdom of Saudi Arabia, MOH: Ministry of Health.

REFERENCES

- Zilz DA, Woodward BW, Thielke TS, Shane RR, Scott B. Leadership skills for a high-performance. Am J Heal Pharm. 2004;61(61):2562-74.
- White SJ. Effective Pharmacy Department Leadership. Hosp Pharm. 2007;42(1):77-9.
- Tsuyuki RT, Schindel TJ. Changing pharmacy practice: The leadership challenge. Can Pharm J. 2008;141(3):174-80.
- Zellmer WA. Pharmacy Vision and Leadership : Revisiting the Fundamentals. Pharmacotherapy. 2008;28(12):1437.
- Steve Acres et. al. Leadership Competency Framework for Pharmacy Professionals. Royal Pharmaceutical Society, Great Britain. 2010.
- Khan MU, Hassali MA, Ahmad A, Elkalmi RM, Zaidi ST, Dhingra S. Perceptions and practices of community pharmacists towards antimicrobial stewardship in the state of Selangor, Malaysia. PloS one. 2016;11(2):e0149623.
- Rafi MS, Naqvi SB, Khan MU, Fayyaz M, Ashraf N, Khan MA, et al. Evaluation of Potential Drug-Drug Interactions with Antidepressants in Two Tertiary Care Hospitals. JCDR. 2015;9(7):FC05.
- Alomi YA. National Pharmacy Administration Programs at Ministry of Health in Saudi Arabia. BAOJ Pharm Sci. 2015;1(9).
- Alomi YA, Alomi AY, Pharm B, Clin Pharm M. A new Guidelines on Hospital Pharmacy Manpower in Saudi Arabia. J Pharm Pract Community Med. 2016;2(2).
- Alomi YA. Primary Care Center Pharmacy Manpower New Guidelines in Saudi Arabia. J Pharmacol Clin Res. 2016;1(1).
- 11. Alomi YA. National Primary Care Pharmacist Competency System at MOH in Saudi Arabia. JPharm Pharm Sci. 2016;1(4):1-5.
- 12. Alomi YA. Patient satisfaction of pharmaceutical care system at Ministry of Health in Saudi Arabia. BAOJ Pharm Sci. 2016;2:19.
- Gouveia WA, Talbert RL, Hackner D, Miller WA. Pharmacy Management. The McGraw-Hill Companies. 2009.
- 14. Holdford D and BT. Introduction to Hospital and Health-System Pharmacy Practice. 2010.
- 15. Brown TR. Handbook of Institutional Pharmacy Practice. American Society of Health-System Pharmacists. 2006.
- 16. Whalley BJ. Foundation in pharmacy practice. 2008;212.
- 17. Stephens M. Hospital pharmacy. Pharmaceutical Press, editor. 2011.
- Louie C, Mertz E, Penfil B, O'Neil E. A pharmacy leadership action study. J Am Pharm Assoc Japha. 2009;49(1):98-104.
- Pollard SR, Clark JS. Survey of health-system pharmacy leadership pathways. Am J Heal Pharm. 2009;66(10):947-52.
- 20. White SJ, Enright SM. Is there still a pharmacy leadership crisis? A seven-year follow-up assessment. Am J Heal Pharm. 2013;70(5):443-7.
- Traynor AP, Janke KK, Sorensen TD. Using personal strengths with intention in pharmacy: Implications for pharmacists, managers, and leaders. Ann Pharmacother. 2010;44(2):367-76.
- Yuan C-C, Lo S-H. Relationship Among Team Temporal Leadership, Competency, Followership, and Performance in Taiwanese Pharmaceutical Industry Leaders and Employees. J Career Dev. 2016;(169):1-12.
- Intergage Consulting Group. Toward an Optimal Future: Priorities for Action Research Report 2 Pharmacy Thought Leadership Summit @BULLET Research Report. Canadian Pharmacist Association. 2016.

 Janke KK, Traynor AP, Boyle CJ. Competencies for student leadership development in doctor of pharmacy curricula to assist curriculum committees and leadership instructors. Am J Pharm Educ. 2013;77(10):222.

and leadership instructors. Am J Pharm Educ. 2013;77(10):222.
25. Cho JC, Girnys JP. Preceptor Development Series National Survey Regarding the Importance of Leadership in PGY1 Pharmacy Practice Residency Training.

Hosp Pharm [Internet]. 2015;50(11):978-84.26. Feller TT, Doucette WR, Witry MJ. Assessing opportunities for student pharmacist leadership development at schools of pharmacy in the United States. Am J

Pharm Educ. 2016;80(5):79.

- 27. Moore RJ, Ginsburg DB. A Qualitative Study of Motivating Factors for Pharmacy Student Leadership. Am J Pharm Edu. 2017;81(6):1-8.
- 360 Degree Feedback Items List. Available from: https://hr-survey. com/360FeedbackItemsList.htm.
- Ministry of Health. An Achievements 2013. 1st Ed. Riyadh, Saudi Arabia: Ministry of Health, Saudi Arabia. 2011;132-5.

Cite this article as: Alomi YA, Albaz MA, AlMuhraj WF, AlKharji MY, Alshuraym NR. National Survey of Pharmacy Leadership at Ministry of Health in Saudi Arabia: Practice Management. J Pharm Pract Community Med. 2018;4(1s):S73-S8.