An Assessment of Safety Culture in Saskatchewan Community Pharmacy Practice

SASKATCHEWAN COLLEGE OF PHARMACY PROFESSIONALS

ISMP CANADA
Institute for Safe Medication Practices Canada
Institut pour la sécurité des médicaments aux patients du Canada

COMPAS
Community Pharmacy Professionals
Advancing Safety in Saskatchewan

CERTINA HO
RPh, BScPhm, MISt, MEd, PhD

JIM KONG
RPh, BSc, PharmD

EDMOND CHIU
RPh, BSc, PharmD

JEANNETTE SANDIFORD
B.S.P.

Objectives

- The Safety Attitudes Questionnaire (SAQ) is a validated instrument that explores the safety culture maturity within work environments, particularly in healthcare.[1,2,3] The questions are divided into 6 domains that influence safety culture: Teamwork, Safety Culture, Job Satisfaction, Stress Recognition, Perception of Management and Working Conditions.[1,2,3]
- The objective of this study was to explore the current perceptions and attitudes on patient safety culture in community practice by Saskatchewan pharmacy professionals.

Methodology

- We administered a 40-item online questionnaire, which was adapted from the SAQ, for a 4-week period between November 5, 2018 and December 3, 2018, to a total of 1262 registered pharmacy professionals (1182 pharmacists and 80 pharmacy technicians) in Saskatchewan to assess their current attitudes and perceptions on safety culture, as well as the overall safety culture climate.
- Scores were obtained for each item utilizing a 5-point Likert Scale (1 = strongly disagree to 5 = strongly agree).
- We conducted descriptive statistics and qualitative thematic analysis, accordingly, on the responses collected.

Results

- We collected 230 responses (18.2% response rate) from 210 pharmacists (17.8% response rate) and 20 pharmacy technicians (25% response rate) (Table 1).
- We stratified the six domains of safety cultures in the SAQ by:
  - Years of work experience of the respondent (Table 2); and
  - Type of pharmacy operated in/by the respondent (Table 3).

TABLE 1. Demographic Information (N is the total number and % is the percentage)

Characteristics	Number of Respondents (*n*=230)	
Position	**N**	**%**
Pharmacist (manager/owner)	74	32.17%
Pharmacist (staff)	136	59.13%
Pharmacy Technician	20	8.7%
Total Number of Years Working in Community Pharmacy		
0-5 years	68	29.57%
6-10 years	42	18.26%
11-20 years	59	25.65%
20+ years	61	26.52%
Type of Pharmacy *		
Corporate	105	45.65%
Banner	55	23.91%
Independently owned	70	30.43%
Approximate Number of Prescriptions Dispensed Weekly		
700 or fewer (per week)	48	20.87%
701 to 1500 (per week)	96	41.74%
1501 to 3000 (per week)	63	27.39%
3001 to 6000 (per week)	18	7.83%
6001 to 12000 (per week)	5	2.17%
12001 or more (per week)	0	0.00%

* Corporate pharmacies are typically directed by a corporate office, with respect to its professional programs, marketing, and ordering, etc. Banner pharmacies are independently owned pharmacies that are affiliated with a central office. They pay fees for the banner's benefit in centralized buying, marketing, and professional programs. Independent pharmacies are not affiliated with any corporately run chains or banners. The owner of an independent pharmacy has complete control over the business in ordering and marketing strategies, etc.

TABLE 2. Safety Culture Domain Mean Scores with Respect to Respondent's Total Number of Years of Work Experience in Community Pharmacy Practice

TABLE 3. Safety Culture Domain Mean Scores with Respect to the Respondent's Pharmacy Workplace Type

SAFETY CULTURE DOMAINS	0-5 Years	6-10 Years	11-20 Years	20+ Years	Weighted Average	Banner	Corporate	Independently Owned	Weighted Average
TEAMWORK	**4.06**	**4.28**	**4.37**	**4.34**	**4.26**	**4.25**	**4.12**	**4.53**	**4.26**
My input is well received in this pharmacy.	4.10	4.50	4.39	4.41	4.34	4.33	4.19	4.60	4.34
In this pharmacy, it is difficult to speak up if I perceive a problem with patient care.†	3.53	4.10	4.16	3.98	3.92	3.98	3.78	4.33	3.92
Disagreements in this pharmacy are resolved appropriately (i.e., not who is right but what is best for the patient).	4.14	4.27	4.38	4.40	4.29	4.26	4.15	4.55	4.29
I have the support I need from others in this pharmacy to care for patients.	4.12	4.36	4.45	4.35	4.31	4.41	4.09	4.60	4.31
It is easy for personnel here to ask questions when there is something that they do not understand.	4.33	4.31	4.50	4.44	4.40	4.44	4.26	4.59	4.40
The people in this pharmacy work together as a well-coordinated team.	4.11	4.26	4.34	4.44	4.28	4.09	4.24	4.52	4.28
SAFETY CULTURE	**4.17**	**4.30**	**4.40**	**4.41**	**4.32**	**4.24**	**4.23**	**4.48**	**4.32**
I would feel safe being treated here as a patient.	4.59	4.70	4.74	4.73	4.71	4.69	4.64	4.86	4.71
Medication errors are handled appropriately in this pharmacy.	4.50	4.55	4.63	4.77	4.61	4.60	4.56	4.71	4.61
I know the proper channels to direct questions regarding patient safety in this pharmacy.	4.53	4.55	4.61	4.71	4.60	4.48	4.59	4.73	4.60
I receive appropriate feedback about my performance.	3.70	3.95	3.89	3.81	3.82	3.44	3.87	4.09	3.82
In this pharmacy, it is difficult to discuss errors.†	3.83	3.73	4.30	4.20	4.02	4.02	3.80	4.00	4.02
I am encouraged by others in this pharmacy, to report any patient safety concerns I may have.	4.14	4.38	4.41	4.28	4.29	4.20	4.20	4.52	4.29
The culture in this pharmacy makes it easy to learn from the errors of others.	3.90	4.23	4.20	4.35	4.16	4.25	3.92	4.47	4.16
JOB SATISFACTION	**3.97**	**3.92**	**4.08**	**3.95**	**3.98**	**3.94**	**3.68**	**4.50**	**3.98**
I like my job.	4.02	4.05	4.11	4.04	4.05	4.04	3.79	4.48	4.05
Working here is like being part of a large family.	3.87	3.78	3.95	3.78	3.85	3.82	3.58	4.30	3.85
This pharmacy is a good place to work.	4.11	4.05	4.18	4.13	4.12	4.14	3.76	4.69	4.12
I am proud to work in this pharmacy.	4.13	4.15	4.38	4.16	4.21	4.22	3.87	4.74	4.21
Morale in this pharmacy is high.	3.70	3.58	3.79	3.65	3.67	3.47	3.40	4.26	3.67
STRESS RECOGNITION	**4.18**	**4.12**	**4.23**	**4.24**	**4.20**	**4.23**	**4.35**	**3.84**	**4.20**
When my workload becomes excessive, my performance is impaired.	4.05	4.03	4.15	4.30	4.13	4.24	4.30	3.72	4.13
I am less effective at work when fatigued.	4.17	4.21	4.32	4.20	4.23	4.28	4.33	4.00	4.23
I am more likely to make errors in tense or hostile situations.	4.31	4.18	4.27	4.20	4.25	4.22	4.46	3.92	4.25
Fatigue impairs my performance in trying situations.	4.19	4.05	4.19	4.24	4.18	4.16	4.38	3.81	4.18
PERCEPTION OF MANAGEMENT	**3.96**	**3.87**	**4.06**	**3.95**	**3.97**	**3.88**	**3.75**	**4.39**	**3.97**
Management in this pharmacy supports my daily efforts.	3.89	4.03	4.15	4.07	4.03	4.06	3.73	4.48	4.03
Pharmacy management doesn't knowingly compromise patient safety.	4.58	4.21	4.54	4.22	4.40	4.55	4.29	4.49	4.40
I get adequate, timely information about events that might affect my work, from pharmacy management.	3.68	3.87	3.96	3.79	3.82	3.60	3.62	4.35	3.82
The staffing levels in this pharmacy are sufficient to handle the number of patients.	3.68	3.35	3.59	3.73	3.61	3.37	3.34	4.25	3.61
WORKING CONDITIONS	**3.80**	**3.81**	**3.61**	**3.78**	**3.75**	**3.82**	**3.51**	**4.11**	**3.75**
This pharmacy does a good job of training new personnel.	3.45	3.36	3.30	3.54	3.42	3.44	3.14	3.89	3.42
All the necessary information for therapeutic decisions is routinely available to me.	4.27	4.51	4.37	4.26	4.34	4.39	4.18	4.57	4.34
Trainees in this pharmacy are adequately supervised.	3.82	3.84	3.56	3.88	3.78	3.78	3.56	4.14	3.78
Problem personnel are dealt with constructively by our pharmacy management.	3.65	3.51	3.20	3.44	3.45	3.65	3.15	3.85	3.45

†All negatively worded items were reverse scored (1 represented strongly agree whereas 5 represented strongly disagree)

Conclusion

- Pharmacy professionals generally have a positive view of the current safety culture. Domains such as Teamwork and Safety Culture were highly scored by pharmacy professionals and there is a general consensus that medication errors are handled appropriately when they occur by a well-coordinated pharmacy team.
- Pharmacy morale tends to differ amongst respondents from different types of pharmacies. Although respondents trust management and believe that patient safety is never knowingly or purposely compromised, there is a need for management to address staffing levels in the pharmacy team to match the number of patients in order to maintain patient safety, as well as continued efforts to train and supervise new pharmacy personnel.
- New or recent pharmacy graduates felt their input could be better received, especially in terms of patient care, and may perhaps benefit from a comprehensive pharmacy orientation/team-building program.
- As medication use continues to rise across Canada, creating and maintaining a robust safety culture will establish a strong precedent for current and future generations of pharmacy professionals to maintain and uphold patient safety.

References:
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3. Norden-Hagg A, Kalvemark-Sporrong S, Lindblad AK. Exploring the relationship between safety culture and reported dispensing errors in a large sample of Swedish community pharmacies. *BMC Pharmacology and Toxicology.* 2012;13:4.