REVIEW ARTICLE

Role Of Community Pharmacists In Providing Oral Health Advice In The Fatehgarh Sahib District In The State Of Punjab In North India

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AIM

To determine the frequency of patients seeking oral health advice and willingness of community pharmacists to provide oral health information in the fatehgarh sahib district in the state of punjab in north india .

INTRODUCTION

The practice of community pharmacists has developed over the years from traditional dispensing of medicine to more profound public and professional involvement in health care which is valuable to the community^{1,16}. General healthcare system considers the community pharmacists as healthcare advisers, preventers, promoters and educators². It was reported that about 26.5% of respondents considered the pharmacist as their first choice of healthcare provider, and in the case of emergency, approximately 37% of respondents identified the pharmacist as their first choice of healthcare provider ^{3,17}.

Chesstnutt *et al* . ^{4,18} discussed the potential contribution of pharmacy staff to dental and oral health in the recent times. They noted important deficiencies in the oral health care knowledge of pharmacists. Anderson ^{5,19} published a paperhighlighting the need for pharmacists to be incorporated into multidisciplinary oral healthcare teams. An investigation published in 2001 assessed the contribution of pharmacists to oral health care in a group of drug users as compared tothat in a group of non-drug users. This research demonstrated that pharmacists already play a important role within special risk groups as far as oral hygiene is concerned, and this could be extended to include a much larger client base 6. Oral problems may indicate unfortunate consequences ^{7,12}.

The most common oral health complaints for which community pharmacists are approached include oral ulcers, toothache, gingival bleeding and loose dentures. Less frequently consulted oral health-related issues are teething problems, mouth rinse choices, and selection of toothbrush and toothpastes ^{8,13,20}. The study evaluated the prevalence of the most common oral health-related complaints encountered by community pharmacists in addition to the recommendations for dental pain and frequently requested dental products.

METHOD

A cross-sectional survey was conducted on the registered community pharmacists in the Fatehgarh Sahib district in the state of Punjab in North India. A list of all the registered community pharmacies was obtained from website of Central Drugs Standard Control Organisation (CDSCO) under Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India . From the list, 60 pharmacies were selected randomly using a random number table . A list of alltheregistered pharmacies was prepared. To show the power of study questionnaires were distributed to four destinations of Sirhind, Bassi Pathana, Amloh and Mandi Gobindgarh to represent the majority areas. Data regarding knowledge and attitudes toward oral health care and oral hygiene products were obtained using aclosed-ended questionnaire. The questionnaire comprised 25 closed-ended questions. One pharmacist from each selected pharmacy participated in this study. Each pharmacist tookaround 15 min to complete the questionnaire. The questionnaire was divided into three sections: The questionnaire consisted of 25 close-ended questions divided into three broad sections. The first section dealt withthe demographic information which included age, nationality, qualification, place of graduation, year of graduation, and number of years working in Punjab. The second section inquired about the frequency of oral and general health advice, gender and age group of clients seeking oral health advice and common oral conditions encountered. The second section also investigated what usually the pharmacists recommend for oral pain, the pharmacist's confidence in providing oral health advice, the most important factor influencing the pharmacists' advice, attending seminars related to oral healthcare and barriers to providing oral health advices. The third section was about the knowledge of the pharmacists regarding nearest dental clinics and whether there is any arrangement between pharmacy and dental clinic in cases of emergencies.

Self administered structured questionnaire was distributed to the randomly selected community pharmacists across the four destinations of Sirhind , Bassi Pathana , Amloh and Mandi Gobindgarh .Data was collected by a single investigator, who personally met the pharmacists and explained to them the purpose ofthe study. The completed questionnaire was collected by the same investigator.Statistical analysis of the collected data was done using the Statistical Package for Social Sciences 10.Pearson's chi-square test was used to compare different variables of the study such as general and oral health advices by pharmacist, gender of clients, oral conditions encountered, recommendations for pain, dental products requested by the clients in all the cities . P-value of _0.05 was used for testing statistical significance.

RESULTS

Dental pain (30%), oral ulcers (26%) and bleeding gums (18%) were the three most common oral conditions encountered by the pharmacists . About half of the pharmacists (50%) referred clients to dentists and approximately 30% prescribed analgesics and 10% gave oral hygiene advices .

Table 1: Demographic data of the participants.

Demographic data	(N/%)
Age	
26–28 years	15 (30%)
29–31 years	13 (26%)
32–34 years	12(24%)
>35 years	10 (20%)
Nationality	
Punjabis	50(100%)

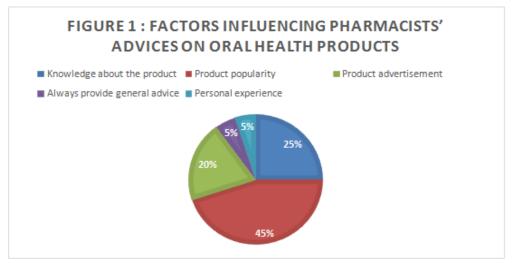
Non Punjabis	0 (0%)
Educational qualification	
Bachelor	45 (90%)
Master and above	5(10%)
Years of working in Punjab	
1–3 years	5(10%)
4–6 years	10 (20%)
7–9 years	15 (30%)
10 years	20(40%)

Table 2: Common oral conditions, recommendations for oral/dentalpain and requests for dental products

Variables	(N/%)
Oral conditions	
Oral ulcer	13 (26%)
Dental pain	15(30%)
Gum bleeding	9 (18%)
Abscess	6 (12%)
Bad breath	4 (8%)
Denture	2(4%)
Tongue problems	1(2%)
Pharmacists recommendations for oral pain	
Refer to dentist	25 (50%)
Prescribing analgesics	15 (30%)
Oral hygiene advices	5 (10%)
Refer to physician	5 (10%)

Variables	(N/%)
Frequently requested dental products	
Tooth whitening	16 (32%) 15 (30%) 13 (26%)
Toothpaste	15 (30%)
Toothbrush	13 (26%)
Mouthwash	4 (8%)
Dental floss	2 (4%)

Tooth whitening (32%) topped the list of the most common requests for dental products followed by toothpaste (30%) and toothbrush (26%) (Table 2).45% pharmacists gave advice based on products' knowledge, whereas 20% and 25% recommended products because of their advertisements and popularity respectively (Fig.1).



DISCUSSION

Pharmacists were actively involved in providing oral health advices, and were willing to participate in oral health activities. the pharmacists provided more general health advices compared with oral health advices. These results agree with the findings of a British study ^{9,21}. Similar to the findings of present study, other studies ^{10,14} demonstrated that substantial number of pharmacists was approached for providing symptomatic relief for dental pain and oral ulcer. The most common barrier to providing oral health services included lack of interaction between pharmacists and dental professionals. This calls for establishing better professional relationships between dentists and pharmacists. However, the pharmacists also recognized lack of oral health knowledge and training a significant barrier. It is imperative that continuing education opportunities should be provided to practicing pharmacists to better benefit the patients seeking oral health advice. In contrast to the results acquired by ^{11,15} which showed more than half of pharmacist recommended dental product based on their personal experience; our study found only 5% of respondents used personal experience in prescribing a dental product.

However, it was encouraging to see about half of respondents recommending dentalproduct based on its knowledge and only few of them made their decision on the product advertisement. It is important to take into account that although the majority of the participating pharmacists recommended their clients to see a dentist in the nearest clinic, a few of them actually met any member of the dental clinic.

The results of the study call for revisiting undergraduate pharmacy curricula and establishing more collaboration with dental institutes. Continuing education courses and programs should be tailored according to the needs of pharmacists to maximize their potential of promoting oral health in the community. In addition, communication and interaction between pharmacists and dentists should be established including emergency referral protocols. These measures would increase pharmacists' knowledge and experience in oral health, and wouldeffectively serve the clients.

CONCLUSION

Community pharmacists are approached frequently for oral health advices in the fatehgarh sahib district in the state of punjab in north india. The clients frequently seek advice about most common oral conditions such as oral ulcer, dental pain and bleeding gums. The study participants refer majority of their clients complaining of oral pain to dentists. The tooth whitening products were most commonly requested in the community pharmacies. Lack of oral health knowledge and lack of interaction with dental professional were main barriers to providing oral health services .The patients living in large cities consult community

pharmacist more frequently regarding tooth whitening products, tooth brush and mouth wash compared with those in small cities of the province. The pharmacists realize their essential role in managing and preventing oral health-related problems. However, majority of them do have proper oral health training in their undergraduate pharmacy programs and they are not provided with continuing education courses in oral health. Almost all community pharmacists were willing to provide oral health information in the community.

REFERENCES

- 1. Amien, F., Myburgh, N.G., Butler, N., 2013. Location of community pharmacies and prevalence of oral conditions in the Western Cape Province. Health SA Gesondheid. 18, 9–15.
- 2. Mann, R.S., Marcenes, W., Gillam, D.G., 2015. Is there a role for community pharmacists in promoting oral health? Br. Dent. J. 218, E10.
- 3. Sello, D.A., Serfontein, H.P., Lubbe, M.S., Dambisya, Y.M., 2012. Factors influencing access to pharmaceutical services in underserviced areas of the West Rand District, Gauteng Province, South Africa. Health SA Gesondheid. 17, 609.
- 4. Dis HekimligiÖgrencilerinin Dental Market ÜrünleriHakkindakiBilgiDüzeylerininDegerlendirilmesiBetül SEN YAVUZ, Elif KANBEROGLU, Ilknur TANBOGA Selcuk Dental Journal. 2021
- 5. Community pharmacy staff oral health training, training needs and professional self-efficacy related to managing children's dental problems Vanessa Muirhead, Donatella D'Antoni, Vivian Auyeung International Journal of Pharmacy Practice. 2020; 28(5): 449
- 6. O.P. Kharbanda, Harsh Priya, Upendra Singh Bhadauria, CharuKhurana, Diptajit Das, Monica Dev, PriyankaRavi, AnupamaIvaturi Journal of Ayurveda and Integrative Medicine. 2021; 12(1): 75
- 7. Macpherson, L.M., McCann, M.F., Gibson, J., Binnie, V.I., Stephen, K.W., 2003. The role of primary healthcare professionals in oral cancer prevention and detection. Br. Dent. J. 195, 277–281.
- 8. Amien, F., Myburgh, N.G., Butler, N., 2013. Location of community pharmacies and prevalence of oral conditions in the Western Cape Province. Health SA Gesondheid. 18, 9–15.
- 9. Maunder, P.E., Landes, D.P., 2005. An evaluation of the role played by community pharmacies in oral healthcare situated in a primary care trust in the north of England. Br. Dent. J. 199, 219–223.
- 10. Bawazir, O.A., 2014. Knowledge and attitudes of pharmacists regarding oral healthcare and oral hygiene products in Riyadh, Saudi Arabia. J. Int. Oral Health 6, 1–4
- 11. Maunder, P.E., Landes, D.P., 2005. An evaluation of the role played by community pharmacies in oral healthcare situated in a primary care trust in the north of England. Br. Dent. J. 199, 219–223.
- 12. Singla D, Kataria B, Kaur U, Root Canal Cleaning and Shaping : A Review, International Journal of Health Sciences (2021) 5 (S1) 95-112.
- 13. Mahajan A, Kaur NP, Ayoub K, Monoblocks in Root Canals: A Review, International Journal of Health Sciences (2021) 5 (S1) 113-121.
- 14. Pareek A, Sood H, Aggarwal G,Tooth Wear: A Review,International Journal of Health Sciences (2021) 5 (S1) 122-133.
- 15. Sethi K, Shefally, Raji J, Working Length Determination: A Review, International Journal of Health Sciences (2021) 5 (S1) 45-55.
- 16. Kaushal R, Gupta I, Gupta U,Recent Advances in Dental Composite: A Review,International Journal of Health Sciences (2021) 5 (S1) 36-44.

- 17. Arora A, Pareek A, Danish Prabhakar, Liners, Bases and Varnishes: A Review, International Journal of Health Sciences (2021)5 (S1)1-9.
- 18. Kaur G, Kaushal R, Danish Prabhakar, Esthetic Restorations and Smile

 A Review, International Journal of Health Sciences (2021) 5 (S1) 10-22.
- 19. Mehta SD, Malhan S, Bansal C, Latrogenic Complications Arising From Cleaning and Shaping A Review, International Journal of Health Sciences (2021) 5 (S1) 56-62.
- 20. Arora A, Gupta U, Gupta I,Dentin Hypersentivity: A Literature Review,International Journal of Health Sciences (2021) 5 (S1) 63-72.
- 21. Sood H, Virk J, Pareek A, Traumatic Injuries of Teeth: A Review, International Journal of Health Sciences (2021) 5 (S1) 23-28.