<u>Introduction</u>

Last month the research round-up provided you with an overview of articles looking the issue of prescribing cascades. This month we will investigate the prescribing of Pre-Exposure Prophylaxis (PrEP) therapy for the prevention of HIV infection. The first article looks at PrEP prescribing in a primary care setting. The second article explores barriers and facilitators to the prescribing of PrEP in the UK. The final article this month looks at PrEP prescribing from a community pharmacy perspective in Canada.

<u>Primary Care Provider HIV PrEP Knowledge, Attitudes, and Prescribing Habits: A Cross-Sectional Survey of Late Adopters in Rural and Suburban Practice</u>

J Sell, R Chen, Christopher Huber, J Parascando, and J Nunez (2023) *Primary Care Provider HIV PrEP Knowledge, Attitudes, and Prescribing Habits: A Cross-Sectional Survey of Late Adopters in Rural and Suburban Practice* Journal of Primary Care & Community Health 14

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This article published in the Journal of Primary Care and Community Health sought to understand the knowledge, attitudes and prescribing habits of clinicians in primary care around the prescribing of PrEP for HIV prevention. The researchers used a cross-sectional survey approach and included 16 rural and suburban practice settings across central Pennsylvania in January 2021. The survey was conducted anonymously and was adapted from a previously published and verified survey tool consisting of 40 Likert scale questions. In total 134 primary care providers were included for analysis.

Most of those who responded admitted to little clinical experience with prescribing in this area (96.3%) and cared for five or less patients with HIV. However there was a high overall knowledge of PrEP and of screening for STI's but a lower amount of knowledge around side effects, laboratory needs and ongoing safety monitoring. With regard to attitudinal responses, most were positive in their attitude to PrEP use and felt it to be generally safe and effective. More than 50% of the respondents had been asked about PrEP by patients but less than 40% had initiated this conversation with patients at attendance. It was noted that less than half had actually prescribed PrEP more than this would have been comfortable in prescribing these items. Of the respondents, family doctors or other providers with longer clinical experience were the most knowledgeable and likely to prescribe. Lack of PrEP education was identified as the greatest barrier and an electronic medical record order set as the greatest facilitator to prescribing PrEP.

The authors conclude that their research adds to the literature around prescribing PrEP and they suggest that PrEP provision in nonurban primary care settings may be an important strategy for increased access to PrEP and reduced HIV transmission and that system-based practice solutions, such as order sets, may be needed to target infrequent prescribers of PrEP.

<u>Barriers and facilitators to HIV Pre-Exposure Prophylaxis (PrEP) in Specialist Sexual Health Services in</u> the United Kingdom: A systematic review using the PrEP Care Continuum

F Coukan, K-Kabelo Murray, V Papageorgiou, A Lound, J Saunders, C Atchison & H Ward (2023) Barriers and facilitators to HIV Pre-Exposure Prophylaxis (PrEP) in Specialist Sexual Health Services in the United Kingdom: A systematic review using the PrEP Care Continuum Journal of HIV medicine 24 (8) 893-913

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This article published in the Journal of HIV Medicine used a systematic review approach to find out the barriers and facilitators to PrEP prescribing in the UK. The authors begin by discussing the inequity of PrEP prescribing within the UK with differences between he home nations and implementations of management plans outlined. They state that the literature shows that PrEP prescribing in the UK is in the region of over 95% for PrEP users who were men who have sex with men despite this population accounting for less than 50% of new HIV diagnoses. To address and identify the issues the authors conducted a systematic review to identify modifiable barriers and facilitators to PrEP delivery in the UK among underserved populations.

A robust search strategy was employed and utilised appropriate literature databases and methodologies but was limited to UK studies and specific national PrEP programmes. Appropriate eligibility criteria were applied and resulted in the inclusion of 44 studies for analysis. Of these, 29 were quantitative, 12 qualitative and three mixed-methods studies. Before full analysis, quality assessments were carried out. The analysis revealed that more than half of the studies (24) were conducted with a population of entirely men who have sex with men with only 11having a mixed population. The remaining nine looked at minoritized populations such as gender and ethnic groups and injectable drug users.

Findings suggest that the main barriers to PrEP prescribing were lack of awareness, lack of knowledge, lack of willingness and a lack of access to PrEP provision. In contrast facilitators included prior HIV testing requirements, agency and self-care. All factors reported are modifiable going forwards and the authors suggest that future research needs to ensure underserved populations are included and prioritized (e.g. ethnicity and gender minorities, people who inject drugs) and provider and structural factors are investigated.

Community pharmacists' acceptance of prescribing pre-exposure prophylaxis (PrEP) for human immunodeficiency virus (HIV)

C Booker, A L Murphy, J E. Isenor, T D. Ramsey, , A J. Smith, A Bishop, D V. Kelly, L Woodill, G Richard, & K J Wilby, (2023) *Community pharmacists' acceptance of prescribing pre-exposure prophylaxis (PrEP) for human immunodeficiency virus (HIV)* Canadian Pharmacists Journal 156 (3) 137-149

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This article published in the Canadian Pharmacists Journal was a mixed methodology study to determine pharmacists' acceptance of a pharmacy PrEP prescribing service in Nova Scotia. The methodology used an online survey method to gather data to inform qualitative interviews. The survey was anonymous and consisted of 31 items and included demographic questions and Likert scale questions on the area of interest. In the survey was the opportunity to declare interest in participating in an interview to identify potential candidates for that aspect of data collection. After eligibility criteria were applied a total of 214 community pharmacists completed the survey, and 19 completed the interview. Data was analysed and several constructs were identified and discussed according to the Theoretical Framework of Acceptability. Each construct was discussed individually and a discussion around each and their impacts was presented. In general pharmacists were positive about PrEP prescribing in the constructs of affective attitude (improved access), ethicality (benefits communities), intervention coherence (practice alignment) and self-efficacy (role).

Pharmacists did however express concerns within other constructs around burden (increased workload), opportunity costs (time to provide the service) and perceived effectiveness (education/training, public awareness, laboratory test ordering and reimbursement). This leads to the authors concluding that the PrEP prescribing service by pharmacists in Nova Scotia has a mixed acceptability to the population studies however it still represents the national service delivery model intended to increase the availability of PrEP provision to underserviced populations in need. They suggest that future implementation needs to consider several aspects of pharmacy workload as well as education and training while also attending to worrying areas such as laboratory testing to ensure the programmes success.

Conclusion

This area of prescribing practice is a developing one and within the UK roll out and provision of services has a different trajectory within each of the home nations. Standardisation and unanimity in who should and could prescribe in this area is a challenge and prescribers should remember their general principles for safe prescribing practice as well as the ethical duty to put the needs of the patient first.