

delirium subtypes and modifiable risk factors that potentially contribute to the development of PD, are required.

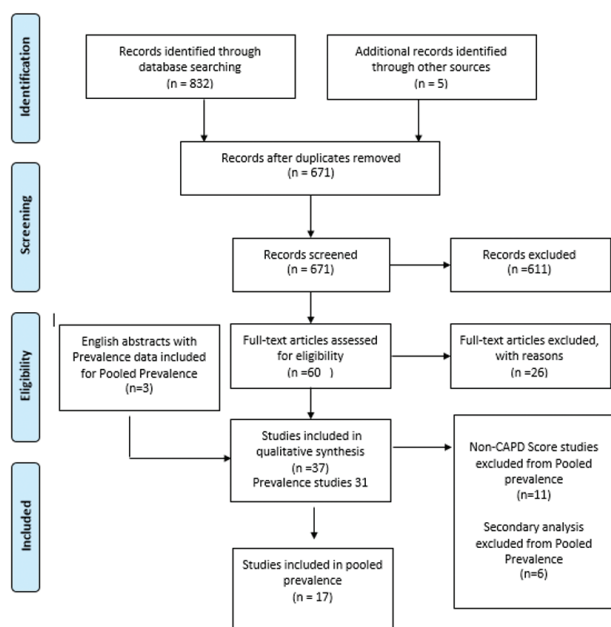


Figure 1: PRISMA flow diagram

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FACTORS PROMOTING SELF-MEDICATION AND IRRATIONAL USE OF OPIOIDS IN CHRONIC NON-MALIGNANT PAIN MANAGEMENT IN PAKISTAN: A QUALITATIVE IN-DEPTH INVESTIGATION

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Introduction: In many Lower and Middle-Income Countries (LMICs) people self-medicate, with non-prescription and prescription drugs both of which are easily available over the counter (1). One of the most common causes for self-medication is chronic pain (2). The role of community pharmacists becomes critical especially in LMICs where

medicines are freely available and pharmacists are directly involved in supply of opioid medicines. Unresolved, prolonged chronic non-malignant pain (CNMP) may lead to self-medication with opioid analgesics and can cause irrational use of opioids. The complications of self-medication with opioids are vast in terms of both scarce resources and adverse clinical consequences such as adverse drug reactions, drug interactions and mortality associated with the diversion from intended use of opioid medicines. Self-medication with opioid analgesics in LMICs have not been explored before.

Aim: This study was designed to explore the factors that might contribute in promoting self-medication and irrational opioid medicine use in CNMP management and exploring potential roles of community pharmacists in stopping/avoiding self-medication with opioids in one LMIC, Pakistan.

Method: Qualitative interviews involving various stakeholders such as pharmacy policy makers (n=10) and people suffering from CNMP (n=12) were conducted. Additionally, focus groups were conducted with community pharmacists (n=38) and doctors (n=30). A semi-structured interview guide was drafted after an extensive literature review and was used for individual interviews and focus groups for each stakeholder respectively. The study duration was from December 2019 to July 2020. Critical case sampling, a type of purposive sampling, was done in order to promote applicability to other cases. Data was analysed using a CAQDAS software N-vivo 12, using thematic analysis. Ethical approval was obtained.

Results: Non-availability of community pharmacists in all pharmacies and lack of medication review services are amongst the major factors that are contributing towards self-medication of opioid medicines. Additionally, lack of awareness of people about opioid medicines and absence of strict laws regarding sale of opioid medicines under a valid prescription allows easy availability and promotes aberrant drug seeking behaviour. These factors contribute towards people not seeking professional health care services for the management of CNMP and continue self-medicating with opioid medicines. As a result, they do not get effective analgesic relief and waste limited financial resources. The major themes and sub-themes are presented in Table 1.

Conclusion: Self-medication with opioid medicines can cause irrational, inappropriate, and ineffective use of medicines and can additionally burden the limited financial resources available for health care needs. This in-depth exploratory study identifies many barriers that can promote self-medication with opioids and recognises a need for a multi-faceted intervention involving community pharmacists to promote rational opioid medicine use. However, major limitations of the proposed intervention identified from this study are the absence of integrated health systems and under-utilisation of community pharmacy workforce. The government needs to invest in infrastructure development, develop new health policies regarding medicine sale and build the role and capacity of pharmacy workforce to perform specialised roles in public safety especially in opioid medicines.

Table 1: Barriers promoting self-medication with opioids in CNMP management

Themes	Sub-themes
Regulatory and legislative barriers	Absence of strict laws and implementations easy availability, no check and balance, unrestricted sale
System barriers	Lack of integrated and unified electronic systems, influenced from pharmaceutical industries incentives, lack of national guidelines, lack of regulatory body roles
Pharmacy workforce barriers	Lack of competent pharmacy workforce lack of specialised services in community pharmacy, lack of pharmacist professional training and education in opioids safety and chronic pain management
People barriers	Patient lack of awareness of medicines and pharmacists, pain not controlled, addiction and tolerance, poverty, non-compliant patients, patient trust issues
Doctor barriers	Medical and medication history unavailable, overload, less time, lack of potent pain killers, lack of review, lack of electronic systems, no communication channels with community pharmacists

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PHARMACY AND PRESCRIBING PRACTICE

A REVIEW OF THE POTENTIALLY INAPPROPRIATE PRESCRIBING IN FRAIL PATIENTS AT THE MILL MEDICAL PRACTICE.

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Introduction: Elderly care is becoming increasingly complex due to the increasing age of the population leading to higher disease burden. The British Geriatric Society (BGS), defines frailty as a 'distinctive health state related to the ageing process in which multiple body systems gradually lose built in reserves' (1). Patients included in this study were

both male and female selected at random. Age included those over the age of 65 with a frailty score over 0.25 to include moderately and severely frail.

Aim: To identify frail patients at The Mill Medical Practice and assess the appropriateness of their prescribed medication using statistically validated medication review tools. This included looking at STOPP/START interventions, anti-cholinergic burden and frailty index.

Methods: Moderately and severely frail patients were categorised using the electronic frailty index within the emis system at the GP surgery. 20% of patients from each group were chosen at random to have their medication assessed using the review tools. The tools included: STOPP/START, Anticholinergic burden calculator, PrescQIPP falls risk, NICE guidelines, and adapted RiO scoring tool.

Results: In total, the medications of 113 patients were assessed using the review tools. 38% of patients had a STOPP intervention and 63% had a START intervention. The most commonly inappropriately prescribed medicine was Furosemide for both patient groups. It has an anticholinergic burden score of 1 and moderate falls risk. Overall, 16% of patients had a drop of one in anticholinergic burden score. Also, an increase in 23% of patients having a score of zero.

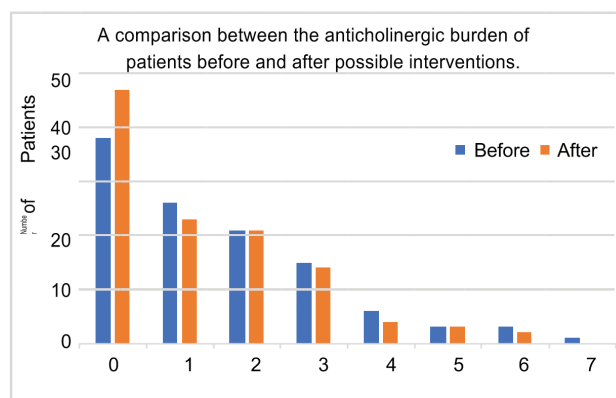


Figure 1. A graph showing the possible changes in average anticholinergic burden score of both patient groups.

Conclusion: This study was successful in identifying those patients that could have changes made to their medication to improve quality of care. Anticholinergic burden can have detrimental effects in those frail patients leading to physical and cognitive changes. Decreasing anticholinergic burden in frail patients is clinically important due to the risk of these adverse effects such as confusion, dizziness which could result in injury. Even a small increase in anticholinergic burden score can have serious effects for these frail patients resulting in a hospital admission (2). By decreasing the medicine burden on frail patient this can reduce issues associated with anticholinergic burden and other medicine related issues in turn improving quality of life. Despite the use of medication review tools which try to prevent inappropriate prescribing, this is still an occurrence within the frail population and primary care. This could be due to: lack of time, limited resources available, patients not wanting to change, prescriber willingness to change medication and availability of healthcare professionals to do medicine reviews. Future work could include looking in depth at the ideas explored in