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COMMUNITY PHARMACIES, LIVED SPACES AND STREET-LEVEL BUREAUCRACY IN ANTIBIOTIC DISPENSING IN KISUMU, KENYA

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Abstract

Community pharmacies function as critical, accessible healthcare spaces where antibiotic utilisation is often negotiated outside formal clinical settings. Despite regulations requiring prescriptions, antibiotics are frequently dispensed without them, particularly in low-and middle-income countries. This study examines community pharmacies as lived spaces where street-level bureaucratic practices such as gatekeeping and discretionary decision-making intersect with antibiotic access and use. A mixed-methods descriptive study was conducted in Manyatta 'A' Sub-Location of Kisumu County, Kenya. Data were collected from 102 pharmacy clients through semi-structured questionnaires, supplemented by 31 unstructured household interviews, 8 key informant interviews, and 3 focus group discussions. Quantitative data were analysed descriptively, while qualitative data were analysed thematically. The majority of pharmacy clients were young women (73% aged 18–30), who often sought antibiotics based on self-diagnosis and prior experience. Amoxicillin (38%), Septrin (18%), and Flagyl (17%) were the most commonly purchased antibiotics, primarily for respiratory and gastrointestinal symptoms. Pharmacy staff exercised discretion in dispensing, balancing professional guidance with commercial pressures and client autonomy. The pharmacy counter emerged as a key site of negotiation, where lay knowledge and cultural practices influenced antibiotic access. Community pharmacies serve as vital lived spaces where antibiotic utilization is mediated by social, cultural, and economic factors. The findings highlight the need for strengthened regulatory enforcement and professional support for pharmacy workers to promote rational antibiotic use. Future interventions should leverage the strategic role of pharmacies as access points for public health education and stewardship.

1 Introduction

The misuse of antibiotics and the consequent antibiotic resistance persists as a global healthcare emergency in the 21st century [12] [13] [22]. Although the evolution of microorganisms through Darwinian mechanisms is an established driver [22], the structural and socioeconomic factors continuously contribute to the global proliferation of antibiotic resistance, with emphasis on low-and middle-income countries [13]. Thus, this study provides an in-depth analysis of the protracted

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mechanisms that continue to influence antibiotic access and use in low resource, micro-settings. In particular, it examines the tension between formal regulation and informal dispensing practices, the role of community pharmacies as frontline health care access points and discretionary practices by pharmacy workers. Not only do these core challenges persist, but they are also exacerbated in the contemporary landscape [14] [15]. Correspondingly, the COVID–19 additionally heightened strains on health systems and normalised self-medication behaviours which further embedded the very practices this study analyses [16] [17]. Ultimately, pharmacies provide medicines prescribed by doctors and nurses but they are also frequently the first and only place of contact when a health need arises.Thus, pharmacies are often recognised as performing a wider public health role [18] [19]. As socially inclusive and convenient places, community pharmacies offer a persuasive space in which people move around and information can be presented in ways that encourage people to engage with it [29] [20]. Indeed, spaces in community pharmacies are constantly being 'woven together out of ongoing stories' [20, p. 131] that include complex interactions and functions relating to environmental space such as over-the counter consultations [29]. These interactions delineate the pharmacy activities from the metaphorically and sometimes literally closed off professional space of the dispensary. In the context of spacetime, the various professionals, staff and pharmacy users interact around the pivotal point of the counter. Accordingly, the pharmacy counter serves as the place where sales are made and medicines dispensed as well as protecting the professional space from the public [23].The counter also acts as the point where customers negotiate with 'gatekeeper' staff about waiting times for prescriptions or direct access to speak to the professionals [21]. Pharmacists believe that customer expectations were more influential in over the counter decision making than utilising an evidence-based approach, particularly when there was customer pressure to supply [23]. Community pharmacy's spatial and temporal scenes of varying complexity evolve from the moment to moment with all present seeking to manage the conflicting demands of their needs, responsibilities and roles. All of these acts of managing are negotiated through spacetime and involve overt and covert emotional entanglements [21]. Consequently, sociologists have recently accorded space a more central role in the study of health and illness and of social care [24]. For instance, a study [21] explored the spatial and social context of community pharmacies as spaces of care from the perspective of pharmacists and customers. The findings showed that the community pharmacy, as a space of care, is threatened by temporal factors such as customers not making appointments to see a pharmacist and the need for their prescriptions dispensed as fast as possible. There were also privacy issues related to showing of body parts by customers leading to embarrassment both for the customers and the pharmacists as they had to navigate through a conflicted space [21].Likewise, [22] researched the community pharmacy in the UK as a multidimensional and socially constructed space. The study identified three key spaces in the pharmacy such as the dispensary, sales area and consulting room. The findings revealed a clear relationship between the space and the sense of professionalism for the pharmacists. Other researches have also focused on particular spaces within the pharmacy and the effectiveness of these spaces for health promotion or patient counselling [2] [3] [4]. These studies are particularly relevant for this research paper in highlighting aspects of community pharmacies as lived spaces.

However, the role of community pharmacies as healthcare spaces for antibiotics utilisation remains unclear. Furthermore, elements of street-level bureaucracy like gatekeeping and discretion in relation to antibiotics dispensing have not been sufficiently addressed.Accordingly, gatekeeping is defined as the social processes through which individuals label clients' behaviour and subsequently grant or withhold access to resources within particular institutional domains [5]. Expanding on the discourse of gatekeeping and discretion, is Lipsky's [6, p. 12] contention that 'street-level bureaucrats effectively make policy because they have broad discretion in decisions about people and because the sum of their individual decisions adds up to agency behaviour'. Lipsky also relates gatekeeping to resource constraints and service rationing by submitting that 'because resources are chronically inadequate relative to responsibilities, street-level bureaucrats ration services. They control client access to benefits and sanctions and, in that sense, act as gatekeepers to government programs' [6. p. 71. Correspondingly, the term gatekeeping calls to mind an image of a healthcare worker "positioned at an entry point, or gate, through which patients must pass to receive care or services" [7. p. 216]. Healthcare professionals, including pharmacists, serve as gatekeepers to regulate resources since their scope of practice grants them exclusive

discretion over specific goods and services. Therefore, the pharmacy case demonstrates numerous ways in which healthcare workers act as gatekeepers that extend beyond medical and fiscal considerations to include legal, ethical and moral ones [16]. Indeed, retail pharmacies, whether large chain drug stores or small independents, facilitate face-to-face communication between pharmacists and their patients. This communication yields experiential knowledge of social characteristics and behaviour that lends itself to a distinct kind of gatekeeping.

Indeed, pharmacists develop strong, ongoing relationships with patients (especially those who use the pharmacy regularly) through consistent interaction and consultation rendering them secondary gatekeepers to primary gatekeepers like physicians along the continuum of healthcare decision-making [5]. Hence, with increasing pressure on physician's workload, it is likely that the community pharmacy will be even more widely used as a first port of call for minor illness [1]. In this context, community pharmacists are well placed for antibiotic stewardship, possessing the capability (knowledge of medicines), opportunity (contact with prescribers and patients) and inherent commitment [8]. Community pharmacists play an important role in influencing household medication-use decisions [9]. This is consistent with other studies in Africa [13] [14]. Close to 70% of respondents reported seeking recommendations from community pharmacists regarding which medicines to buy in the event of an illness [9]. Still, other studies have shown that members of the public present to pharmacists and their staff by: requiring general health advice, asking to purchase a named medicine, and requesting advice about symptoms [18] [10] [11] [9] [14] [5] [36]. In Kenya, assessment of the pharmacy clients' illnesses decision to prescribe and/or dispense antibiotics by the pharmacy personnel was based on the pharmacy clients' own descriptions about how they felt. It is not clear if indeed the pharmacy clients were authoritatively able to describe their symptoms and were able to acquire the right antibiotics for the illnesses [10]. These findings suggest that other than just being points of antibiotic distribution, community pharmacies also act as important spaces where negotiation of healthcare takes place. These negotiations illuminate the dynamics of antibiotic utilisation in which clients seek treatment while pharmacy workers exercise discretion in dispensing medications. Moreover, when consumers seek help at the point of purchase, this can be termed 'facilitated self-medication'. Where medicines are purchased through pharmacies, staff are in a strong position to facilitate self-care decision-making by consumers since in most pharmacies, the transaction takes place through a counter assistant or the pharmacist. Although self-care is most of the time seen as a public health problem, it may also be considered an act of empowerment and counter-hegemony if it takes into consideration the autonomy of social groups to self-understand and self-alleviate a disease or illness. When it comes to the institutional health care context, self-care becomes a space where various types of institutions, knowledge, and representations coexist [25].

Notably, regulations governing governing the retail pharmaceutical sector in Kenya is overseen by the Pharmacy and Poisons Board (PPB), Kenya's medicines regulatory authority. These regulations are enforced by pharmaceutical inspectors and public health officers (PHOs), whereas enforcement of professional ethics is overseen by the professional bodies representing pharmacists (degree holders) and pharmaceutical technologists (diploma holders). Regulations are accompanied by penalties for non-compliers, ranging from fines and suspension to prison sentences [26]. Despite legal requirements that antibiotics be dispensed only with a prescription, antibiotics were obtained without a prescription, owing to increased access and poor enforcement of the legislation [27] [28]. This tension provides the basis for this paper in which pharmacy workers are conceptualised as street-level bureaucrats whose scope of activities are woven around rules (regulations governing the retail pharmaceutical sector) [26] that define their power [41]. Consequently, the paper aims to provide an understanding of the implications of this tension in pharmacy workers' exercise of discretion in antibiotics dispensing amidst the formal regulations that govern pharmaceutical practices and, patients/consumers' autonomy with regards to self care and self-medication.

2 Theoretical Framework

Prior studies have examined pharmacies as spaces of care [21] and gatekeeping in healthcare [5]. Nonetheless, less attention has been paid to how these dynamics intersect with antibiotic dispensing in low-resource settings. Thus, the study pursues the convergence of Lefebvre's [38] concept of lived

space and Lipsky's (6) street-level bureaucracy framework with community pharmacies in Kisumu. In Lefebvre's framework, space encompasses spatial practice, representations of space and representational spaces. This triadic conceptualization views space as socially produced through everyday practices, experiences, and symbolic meanings [38]. Hence, the community pharmacies becomes more than just retail outlets but dynamic lived spaces where antibiotic utilization is negotiated, identity performed and health behaviors culturally embedded.

The focus of Lipsky's [6] street-level buraucrcy framework is on frontline public service workers. These public service workers interact directly with citizens and excercise discretion in implementing policies where they operate under resource constraints, ambigous rules and competing pressures. In the context of antibiotic dispensing, pharmacy workers as street-level bureaucrats excercise discretion and gatekeeping when mediating between formal regulations such as prescription requirements and the demands of pharmacy clients to shape health outcomes. These two frameworks work in concert to provide a lens for anlyzing how space and bureaucratic space converge in community pharmacies. They highlight how antibiotic dispensing is the product of not just clinical guidelines, but also social interactions, spatial arrangements and client agency.

3 Objective of the Study

To investigate how community pharmacies function as lived spaces for antibiotics utilisation, emphasising clients' experiences and the impact of street-level bureaucratic practices on their access and use.

4 Methodology

The study used a descriptive research design. The study was conducted in Manyatta 'A' Sub-Location of Kisumu County, Kenya. The study population comprised of 28 pharmacies, pharmacy clients, pharmacy proprietors and pharmacy clerks. Sample size for the pharmacies was 8 drawn through the 30% threshold method [29]. The 8 pharmacies were selected through simple random sampling with the aid of an already computer generated random numbers' table. The sample size for pharmacy clients was 102 arrived at inductively through a modified theoretical sampling strategy. The appropriateness of this sampling strategy was to facilitate the collection of both quantitative and qualitative data [39]. Moreover, the modified theoretical sampling strategy ensured the represetativeness across pharmacy types and clients but not to the entire population of pharmacy clients and pharmacies in Kisumu. The strategy balanced theoretical development with practical research constraints. Pure theoretical sampling continues to theoretical saturation. However, the adaptation of the modified theoretical sampling strategy included a predetermined sample size (n=102) that ensured feasibility while it maintained the purposive, concept-driven participants' selection. Thus, sampling and data collection were concurrent activities while data analysis occurred before and after all the 102 interviews were concluded. Respondents were therefore selected purposively from each of the 8 pharmacies to sample size (n=102) and not to data saturation. The sample size was considered appropriate according to Kathuri and Pals [30] who indicate that a sample of at least 100 is sufficient for a survey. Sample size for the household follow-up interviews was 31 informants also determined according to Prakash 30% rule. The 31 informants were selected through a systematic sampling procedure. These sample were considered sufficient for theoretical exploration while at the same time providing descriptive quantitative data on patterns of antibiotic use. Quantitative and qualitative data were collected through 102 semi-structured questionnaires. More qualitative data were collected using 31 unstructured questionnaires, 8 key informant interviews and 3 focus group discussions. Quantitative data were analysed using descriptive statistics through excel and results presented in frequency tables. Qualitative data were analysed thematically and presented through verbatim quotes. The thematic analysis was conducted according to Braun and Clark's six-step approach [42] with qualitative and quantitative findings during interpretation to provide a meticulous comprehension of antibiotic dispensing practices.

Permission to proceed with the study and guarantee respect for human subjects was obtained from Maseno University Ethics and Review Committee. Informed consent was obtained from all participants after explaining the nature of the study. Respect for the privacy and dignity of the respondents/participants was maintained throughout the data collection and analysis process. This involved informing the respondents/participants that their participation in the study was

completely voluntary and they were assured of confidentiality. Given the study area and the population, the semi-structured questionnaires for the pharmacy clients and unstructured questionnaires for the household informants were translated and back-translated from English to Dholuo to ensure full comprehension by the respondents/participants. No identifying name tags were used in the data collection instruments. Study records that contained information about the participants were handled as confidentially as possible. All research records were coded so that no person outside the study could identify the participants/respondents personally. Participants'/respondents' names were not used in the report about the study. The principle investigator kept all the information generated in this study. All study data were stored on a secure computer, accessed only by the principle investigator.

5. Findings and Discussion

5.1 Participant Profile

Results of the gender and age of pharmacy clients are summarised in table 1.

Table 1. Socio-Demographic Profile of Pharmacy Clients in Manyatta 'A' Sub-Location (N = 102

Gender	**Frequency**	**Percentage**
Male	25	24%
Female	77	76%
Age Group	**Frequency**	**Percentage**
18-30	74	73.0%
31-40	14	13.5%
41-50	9	8.5%
Above 51	5	5.0%

The study population comprised of 102 pharmacy clients with disparities in gender and age. Variably, 76% (n=77) were female, while 24% (n=25) were male. Correspondingly, majority of clients were in the age range of 18-30 years (73%), followed by 31-40 years (13.5%), 41-50 years (8.5%) and over 51 (5%). These findings align with a study in Kenya which reported that women, especially young women accessed community pharmacies as first point of care thus circumventing formal health systems [10]. Consistently, a systematic review across LMICs documented that women were more probable to self-medicate and purchase antibiotics without prescriptions as a result of caregiving responsibilities and familiarity with symptoms [15]. The domination of the age-group 18-30 compares with research in Indonesia which found that due to education or social networks, young adults often feel confident diagnosing themselves and choosing antibiotics based on prior experience [31]. The current study results on the demographic profile pattern reflects on the integral part that young adult women play as primary users of community pharmacies in Manyatta 'A' sub-location. This gendered trend is a further indication that women as caregivers, are central actors in managing household illnesses though healthcare access and antibiotic-seeking behaviours. Accordingly, the predominance of clients in the age-group 18-30 (73%) reveals a youthful demographic exercising autonomy in seeking medication. This age group demonstrates preference for convenience, affordability and immediacy citing long hospital queues and consultation fees as barriers to formal healthcare access as illustrated in the following verbatim quote by a 27-year old female pharmacy client:

"If I already know my symptoms and what medicine will make me better, I'm not going to go to the doctor… it's cheaper for me to just go to the pharmacy."

This trend demonstrates a shift toward consumer-driven health-seeking practices where pharmacy workers have to balance between their roles as both service providers and informal gatekeepers. The demographic dynamics is a further indication of the impact it has on street-level discretion such that younger pharmacy clients who are confident in their self-diagnosis may resist

pharmacy workers' efforts to impose restrictions. This is justified by a male pharmacy clerk who noted:

"If you try to advise, you may lose the customer because they may view you as invading their privacy"

Thus, the age and gender demographics not only point to the tension existing in the demand for antibiotics, but also the nature of interactions between the pharmacy clients, pharmacy workers discretionary practices, and the informal health negotiations in community pharmacy spaces. Notwithstanding the relevance of pharmacy clients' demographic profile, notable limitations exist in the study such as the lack of data on education, income and care-giving roles which would provide further impetus on the gendered pharmacy usage more clearly. Future research could for instance investigate the intersection of education, occupation and care-giving roles with gender and age on the influence of antibiotic practices.

5.2 Commonly Purchased Antibiotics

Table 2.Types and Frequency of Commonly Purchased Antibiotics (N = 102)

Antibiotic	**Frequency**	**Percentage (%)**
Amoxicillin	38	38
Septrin	18	18
Flagyl	17	17
Ampiclox	11	10
Erythromycin	7	6
Tetracycline	5	5
Ampicillin	3	3
Doxycycline	2	2
Norfloxacin	1	1
Total	**102**	**100**

The results show that the most frequently purchased antibiotic was Amoxcillin (38%), Septrin (18%), Flagyl (17%), and Ampiclox (11%). Other less purchased antibiotics were erythromicin, Tetracycline, Ampicillin, Doxycycline, and Norfloxacin. Verbatim quotes provides illustrations into these quantitative results as indicated:

"Some (pharmacy) clients come and say Amoxil, septrin… mostly they use it for coughs, sore throat and Flagyl for stomach ache" (Pharmacy proprietor, 36 years).

"They have had the same problem and used the drugs before! Somebody (pharmacy client) just come and say give me Amoxil and you still don't know what he or she is suffering from" (Female pharmacy clerk, 25 years old)

Similarly, an informant recalled:

"I have known from the past, from my parents when they used to send me to the shop, that Flagyl treats stomach ache" (Female informant, 20 years old).

These results are consistent with a study in Ethiopia which indicated that sale for Amoxicillin and Cotrimoxazole were common [32]. Another study in South Africa also revealed that Metronidazole was a commonly dispensed antibiotic [35]. For practical purposes, antibiotics may be divided into two main categories. These include the first-line category that are mainly in general use and whose therapeutic values are well established. This category comprises amoxicillin (amoxil), co-trimoxazole (septrin), tetracycline, flagyl, metronidazole, erythromycin, ampiclox, ciprofloxacin, ampicillin and chloramphenicol. The second-line consists of those antibiotics in restricted use either

because the indications for them are more limited or because they are deliberately kept in reserve. There are special circumstances in which antibiotics in the second category are required. Either because of resistance of the bacteria to first-line antibiotics or hypersensitivity of the patient [40].

Extrapolating from the results of the current study, the antibiotic purchase trends highlight a reliance on broad-spectrum antibiotics used to self-treat common ailments such as respiratory tract infections, gastrointestinal issues and general infections. Broad spectrum antibiotics are active against many different types of bacteria while narrow spectrum antibiotics are active against one or few types of bacteria [41]. The verbatim quotes further demonstrate a deterministic context of lay knowledge on antibiotic choice and usage. The statements also reflects an experiential and habitual antibiotic use where clients rely on familiarity and not formal diagnosis to guide antibiotic selection.

Thus, the findings show how antibiotics are embedded in cultural knowledge and routines. Consequently, pharmacy clients in the study equate certain symptoms with specific antibiotics based on familial or community practices rather than medical advice. It is important to note that even though the findings on commonly purchased antibiotics provide essential context, there are some limitations. For instance, there is no link of antibiotic purchases to confirmed diagnosis hence the difficulty in determining the clinical appropriateness of use. Moreover, the study was conducted in a single peri-urban informal settlement such that the findings may not reflect rural of higher-income urban settings. However, future studies could explore the link between antibiotic use and clinical diagnosis using rapid diagnostic tools in community pharmacies to assess appropriateness. Furthermore, there is need for using the street-level bureaucracy framework, that is, how discretion is exercised in responding to customer requests versus promoting responsible use.

5.3. Community Pharmacies as Lived Spaces and Street-Level Bureaucracy

The following verbatim quotes are used to contextualise community pharmacies as lived spaces. The quotes relate to the activities at the point of access and interaction within the community pharmacies. Hence the following quotes:

“Some (pharmacy) clients come and say Amoxil, septrin… mostly they use it for coughs, sore throat and Flagyl for stomach ache” (Pharmacy proprietor, 36 years)

This quotation depicts a real-time pharmacy encounter that demonstrate how pharmacy clients enter pharmacies with self-diagnosing symptoms and pre-determined antibiotic preferences based on those symptoms. Accordingly, the community pharmacy becomes a social space where antibiotic-seeking behaviours are enacted, negotiated and normalised. In this context, pharmacy clients present to the pharmacies with predefined drug choices such as Amoxil for coughs or Flagyl for stomach aches, suggesting a routine, culturally embedded knowledge of antibiotics. Thus, the pharmacy’s role is conceptualised as both a consultative and dispensing space that is constructed through habit and experiential knowledge. This analysis identifies with Lefebvre’s critical tenet that space should be seen as the site of ongoing interactions of social relations rather than the mere result of such interactions. And, that space is a process of production rather than a product [39]. These encounters illuminate how community pharmacies function as lived spaces where access to antibiotic is negotiated through social interaction rather than clinical judgement. Furthermore, the pharmacy counter is rendered a site of spatial practice through client requests and representations of space through professional norms to produce a hybrid model of care.

In another quotation, an FGD participant noted that:

“A client will come with ten shillings for Amoxil and if you try to advise you may lose the customer because they may view you as invading their privacy” (Male pharmacy clerk, 30 years old)

This quotation captures the economy-sociology paradox that characterises community pharmacies as lived spaces where commercial and relational tensions manifest. Accordingly, this interaction draw attention to the informal healthcare negotiations that illustrate patron-client autonomy and social expectations about mutual engagement within these partially public spaces. This tensional discussion fits into the tenets of Bourdieu’s framework on habitus (embodied dispositions), capital (social, cultural, symbolic) and field (structured social spaces) [34]. Additionally,

Bourdieu's concept of habitus explains the embodied knowledge and dispositions that pharmacy clients bring into these spaces as illustrated in the following text:

"I have known from the past, from my parents when they used to send me to the shop, that Flagyl treats stomach ache"

A conclusion is therefore inferred to the effect that healthcare interactions in a community pharmacy are not neutral. The pharmacy is a structured social space where different forms of capital intersect. In the context of Bourdieu [35], the community pharmacy equates to a field where pharmacy clients express agency based on habitus and social capital. Accordingly, pharmacy clients yield experiential knowledge while pharmacy personnel participate in symbolic negotiation characterised by professional demarcations, authority and trust. The clients' dependence on familial knowledge is a reflection of the habitus influenced by prior healthcare experiences. On the same accord, pharmacy staff's discretionary dispensing typify a form of symbolic capital within the field of community healthcare. The tensity between lay and professional expertise emphasises the role of pharmacy workers as street-level bureaucrats, who equilibrate regulatory mandates with client autonomy.

In another instant, a Key informant noted that:

"Some (pharmacy clients) come (to the pharmacies) when they are coughing and say I need Amoxil, some say they have diarrhea and I give them Flagyl and explain to them how to use it." (Key Informant, 38 years old)

This illustration demonstrates the direct action experienced at the pharmacy point of contact where pharmacy personnel enact clinical roles, pharmacy clients engage in symptom-based self-diagnosis and pharmacies facilitate a socially driven hybrid model of healthcare. These patterns are further reflected in a study in Indonesia, where clients rely on drug stores as an extension of family healthcare decisions [31]. In Tanzania, community drug shops are active arenas for health negotiation, shaped by socil familiarity and economic convenience [36]. Other researches have also focused on particular spaces within the pharmacy and the effectiveness of these spaces for health promotion or patient counselling [2] [3] [4]. Thompson and Bidwell [21] for instance explored the spatial and social context of community pharmacies as spaces of care from the perspective of pharmacists and customers. Their findings showed that the community pharmacy, as a space of care, is threatened by temporal factors such as customers not making appointments to see a pharmacist and the need for their prescriptions dispensed as fast as possible. There were also privacy issues related to showing of body parts by customers leading to embarrassment both for the customers and the pharmacists as they had to navigate through a conflicted space. Consequently, the findings of the present study show that community pharmacies in Manyatta 'A' Sub-location operate beyond their biomedical scope. The aforementioned narratives demonstrate how pharmacies act as informal, accessible, and community-integrated spaces of healthcare where clients and pharmacy personnel negotiate healthcare outside formal clinical structures. This mediating role of community pharmacies acknowledges their unique status within the healthcare ecosystem.

6. Strengths and limitations of the study

The study employed a descriptive research design incorporating both quantitative and qualitative methods which allowed a better examination of antibiotic utilisation practices in community pharmacies. The inclusion of various perspectives from pharmacy clients, pharmacy clerks, pharmacy proprietors and household informants ensured a deeper comprehension of how community pharmacies function as lived spaces for health negotiations and street-level bureaucracy. The study used local language translations which improved data accuracy and guaranteed that study participants fully understood the study questions. Furthermore, the application of the street-level bureaucracy framework offers a lasting analytical prism to understand the persistent policy-practice gaps. The insights into the micro-level negotiations at the pharmacy spaces provide an enduring understanding of a global health issue that continues to shape antibiotic resistance crisis, as acknowledged in recent global and national reports [12] [37].

However, the study is not without some limitations, for instance, it was carried out in one peri-

urban settlement which may hinder generalisation of the findings to rural or affluent urban contexts. Moreover, there is limitation on the profound analysis of factors that impact antibiotic-seeking behaviours because other pertinent demographic characteristics like income levels, educational background and care-giving roles were not comprehensively captured. Additionally, the study relied on self-reported information and observation of purchasing behaviours. This made it difficult to determine whether antibiotic use was clinically appropriate without the benefit of medical confirmation of diagnosis. Ultimately, the cross-sectional nature of the study meant that the results were a snapshot in time as opposed to long term patterns.

7. Conclusion

Community pharmacies in Manyatta 'A' Sub-Location act as lived spaces where antibiotic-seeking behaviours are enacted, mediated and regularized. Pharmacy clients depended on experiential and habitual knowledge for antibiotics selection and subsequent use. Specific antibiotics like Amoxicillin, Septrin and Flagyl were frequently purchased for common illnesses such as coughs, sore throats and stomach upsets. Thus, community pharmacies operated as access points for antibiotics as well as spheres of interaction where pharmacy clients come with pre-determined choices for preferred antibiotics, and pharmacy staff mediated between professional guidance and commercial obligations. These results suggest that antibiotic utilisation within community pharmacies in Manyatta 'A' Sub-Location is not only influenced by medical demands but also cultural familiarity and accessibility. Thus, acknowledging community pharmacies as routine health care spaces emphasises their significance in swaying antibiotic use in the community. Consequently, future interventions should focus on community pharmacies as crucial points of entry in as far as enhancing judicious antibiotics-use practices such as reinforcing regulation and supporting pharmacy personnel in advancing rational use. Furthermore, future research should include spatial ethnography to comparatively examine how lived pharmacy spaces intersect with antibiotics use across urban, peri-urban and rural contexts.

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