Sari-sari Stores as Community Pharmacies? A Qualitative Exploration of *Sari-sari* Stores Selling Medicines in the Philippines

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ABSTRACT

Background and Objective. Despite laws prohibiting the sale of pharmaceuticals outside licensed pharmacies, *sari-sari* stores continue to informally sell medicines, bridging access challenges especially in remote areas. The study explores the roles and perceptions of *sari-sari* stores as informal medicine providers.

Methods. The study draws on ethnographic insights from key informant interviews with fourteen (14) *sari-sari* store owners or *tinderas*, probing into medicines sold in sari-sari stores and their perceived effectiveness. Data were analyzed using thematic analysis.

Results. *Sari-sari* stores serve as informal yet critical points of access to common medicines for everyday illnesses, especially in remote areas where pharmacies are distant and transportation options are limited. Many *tinderas* began stocking medicines initially for personal and family use, but later extended them to the community in response to demand, even offering advice based on their lived experiences. Nevertheless, *tinderas* distinguish their role from pharmacies by limiting sales to non-prescription drugs, although a few exceptions revealed access to antibiotics and prescription medicines. These position *sari-sari* stores as central to self-medication practices, arising as a reflection of health inequities in the Philippines.

Conclusion. The study underscores the critical role played by the *sari-sari* stores in local healthcare practices in the Philippines, especially in areas with limited formal healthcare access. It highlights the need for regulatory approaches that consider the socioeconomic realities of both storeowners and consumers, ensuring policies do not inadvertently restrict healthcare options for those who need them the most.

Keywords: sari-sari stores, community pharmacies, medicines, Philippines

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INTRODUCTION

Strictly speaking, Philippine laws explicitly restrict the sale of pharmaceuticals—including over-the-counter (OTC) medicines—to drug stores or pharmacies. Section 25 of the Republic Act No. 5921 or the Philippine Pharmacy Law is clear that "No medicine, pharmaceutical, or drug of whatever nature and kind or device shall be compounded, dispensed, sold or resold, or otherwise made available to the consuming public except through a prescription drug store or hospital pharmacy."[1] OTC medicines, which are used for the symptomatic relief of minor ailments without the need for a prescription, are further categorized by the Philippine

Pharmacy Act or Republic Act 10918 into those that can be dispensed without the supervision of a pharmacist and pharmacist-only OTC medicines.[2] While both laws require the supervision of pharmaceutical establishment by a pharmacist, the new law also provides for the differentiation of pharmaceutical establishments into two categories, A and B, where the latter, can only dispense household remedies and OTC medicines (except Pharmacist-only OTC), with minimal supervision from a pharmacist, requiring only at least two hours/week, as opposed to Category A pharmaceutical establishments which require immediate supervision during operation hours. Hence, in sensu stricto, the sale of pharmaceuticals in *sari-sari* stores falling under non-traditional outlets of pharmaceutical products in Category B is illegal, unless duly licensed by the FDA.

Questions regarding the legality of these sales perhaps became more evident during the crackdown on *sari-sari* stores selling counterfeit medications against COVID-19 early in 2022, with the movement to prohibit even the selling of OTC drugs that do not require pharmacist supervision gaining traction.[3] However, this was also met with opposition from various groups that bemoaned the difficulty of access to drugs, especially in geographically isolated areas. It is also worthy to note that in the Implementing Rules and Regulations (IRR) of RA 10918, there is a clause that introduces some ambiguity, especially in enforcing the law, that "due considerations shall however be given to geographically isolated and disadvantaged areas (GIDA) as may be determined by DOH."[4] Another layer of liminality is in the very categorization of medicines. Whereas FDA Circular 2018-014 provides a list distinguishing between Pharmacist-only OTC medications and Household Remedy Products, the list is not exhaustive considering the plethora of available pharmaceuticals in the market.[5]

The present research seeks to contribute to this discussion through offering an ethnographic analysis of *sari-sari* stores as "community pharmacies"– that is, as informal medicine providers whose place in society remains critically understudied. Drawing on key informant interviews in different sites ranging from rural to highly urbanized, it approaches the phenomenon not as a legal issue but as an anthropological query, which the researchers argue is sorely needed if we are to engage in genuine evidence-based policymaking.

The *Sari-sari* Store

Sari-sari stores are a fixture in the Philippines. The term "*sari-sari*," meaning miscellaneous, points to the variety of goods sold inside the neighborhood store. *Sari-sari* stores are a major distribution avenue for consumer goods, owned and operated by residents.[6] In urban and rural areas alike, *sari-sari* stores are ubiquitous yet inconspicuous, blending with the neighborhood facade save for marquee designs bearing the store's name, typically offered by commercial companies as a form of advertising.[7] Many are built in front of the owners' houses or are themselves part of the houses, providing *sari-sari* stores a sense of 'in-betweenness', being "at once private and public, of the home and the market".[6]

The interiors of *sari-sari* stores tend to be small, with interactions between the storeowner and customer taking place through a large window or a wire screen. Some stores also offer a few chairs and tables in front of the store for on-site consumption, typically of cigarettes and beverages.[7] As such, the *sari-sari* store is more than a site for economic transactions; it is also a social space. *Sari-sari* stores are where people meet, drink, smoke, and gossip. Turgo went as far as describing the *sari-sari* store as the community's myopticon, "where people's day-to-day dealings with everyone in the community and its environs are reported and discursively brought under the gaze of the 'entire community.'[8] The '*tindera*' then holds a unique and influential role as the eyes and ears of the community.

The target consumer base of *sari-sari* stores is its locals, but especially the working poor. A key feature of *sari-sari* stores is their "tingi-tingi" approach, which refers to a "by-the-piece" mode of commerce that breaks down bulk merchandise products into micro-servings.[9] These micro-servings are the most affordable options for local customers, especially for low-income residents, since purchasing large quantities of staple goods is enormously costly for the average Filipino. In turn, *sari-sari* owners benefit from the multiple sales transactions from this 'sachet economy.' Other than through micro-servings, *sari-sari* stores also offer flexibility by extending small lines of credit to their clientele and operating without a fixed work schedule, adjusting their store hours to the needs of their customer base.[7]

These home-based neighborhood stores sell all types of goods, especially those considered basic necessities. These often include medicine for ordinary ailments such as cough and colds.[8] This, however, is now under threat with the Department of Interior and Local Government's (DILG) crackdown against *sari-sari* stores selling medicines, claiming to operate under Republic Act No. 10918 or the Philippine Pharmacy Act, which indicates that only FDA-licensed retail drug outlets or pharmacies are allowed to sell medicines.[3]

Drawing on fieldwork in Marikina in the late 1980s, Hardon observed that more than half of medications documented across two barangays in Marikina were acquired from *sari-sari* stores.[10] *Sari-sari* stores were found to sell drugs including antidiarrheals and analgesics to people without prescription, complementing the tendency of community members to use pharmaceuticals at the onset of symptoms to prevent illnesses from progressing.[11] More recent analyses of the Philippine health system have recognized that while private drug store chains dominate the market, many Filipinos at the barangay level obtain their medicines from the *sari-sari* store.[12]

This 'informal' market is not limited to the Philippines. In many Third World countries, the informal market constitutes the rule, with informal structures of healthcare

forming the largest part of the public health sector.[13] The informal economy is characterized by the absence of formal social control. In developing countries, the informal economy is viewed as an economy of survival, whose main aim is to generate income for those involved.[14] This informal market is driven primarily by health inequity—that is, by the reality that the formal market, especially privatized health care, is largely inaccessible to the poor, compounded by existing maladies within the formal health system, ranging from high cost of drugs and long wait times to the inadequate number of health centers and drug shortages.[13,15] For the poorest, the informal market is the only pathway to healthcare.

The relationship between the formal and informal economy is symbiotic, preserving each other, but inherently unequal. The formal market supplies the informal market with large quantities of pharmaceuticals through agents who sell drugs depending on demand regardless of necessary dose, exculpating the pharmacist who gets to keep the profit. Furthermore, when their interests become threatened, the pharmaceutical industry can mobilize the law to annex the informal market, in the guise of protecting public health.[13] For the longest time, the informal market for medicines was solely viewed from a public health standpoint, bearing the slogan "street pharmaceuticals kill!"[15]

This dynamic warrants looking into the informal economy of pharmaceuticals through the lens of anthropology. Furthermore, there is a need to expand the literature to account for other contexts that remain understudied. For instance, in the Philippines, the informal market includes the 'Quiapo medical center,' which pertains not to a concrete institution but rather the area surrounding Quiapo church. Encompassing the plaza and the side streets, the Quiapo medical center houses vendors that sell a variety of products, including amulets, minerals, and especially medicinal flora and fauna.[16] Additionally, the informal economy has broadened to include online marketplaces, where drug products are being sold in online e-commerce platforms such as Shopee and Lazada and even social media platforms like Facebook.[17] Exploring these contexts is critical in gaining a fuller understanding of the informal market for medicines.

MATERIALS AND METHODS

Research Approach and Paradigm

The study adopts a qualitative research paradigm, aimed to gather an in-depth understanding of the subject of inquiry.[18] It specifically employs a phenomenological approach, seeking to unearth phenomena from the perspective of how people interpret and attribute meaning.[19] With phenomenology as a take-off point, the study will conduct an ethnographic analysis of *sari-sari* stores, specifically their role as informal medicine providers.

The authors comprise researchers, physicians, and cultural workers, but are first and foremost medical anthropologists attentive to the mutual constitution of culture and health. Their disciplinary training foregrounds the social and cultural dimensions of illness and care, placing analytical value on everyday health practices. This perspective informed the development of the interview guide and the conduct of the interviews.

Table 1. Geographic Distribution of Interviews

Location	Area Type	No. of participants
Bulacan		
Malolos	1st class urban-component city	3
San Jose Del Monte	1st class urban-component city	5
Guiguinto	1st class municipality	1
Balagtas	1st class municipality	1
Marinduque		
Boac	1st class municipality	1
NCR		
Quezon City	Special City (highly urbanized city; HUC)	2
Rizal		
Rodriguez	1st class municipality	1
Total		14

Research Locale

The study was conducted primarily in Bulacan and sites in Marinduque, Quezon City, and Rizal (Table 1).

Bulacan

The Province of Bulacan is part of the Central Luzon Region, bordered by Aurora and Quezon to the east, Nueva Ecija to the north, Pampanga to the west, Rizal to the southeast, and Manila Bay to the southwest. Its proximity to the National Capital Region (NCR) and position as a gateway to northern Luzon provide Bulacan with strategic advantages. Bulacan comprises 20 municipalities, 4 cities, and 572 barangays. This study focuses on the City of Malolos, the City of San Jose del Monte (CSJDM), and the municipalities of Guiguinto and Doña Remedios Trinidad (DRT). Malolos, the provincial capital, is located in southwestern Bulacan. DRT, which covers 33.52% of the province's land area, is the largest municipality, while Guiguinto, occupying just 0.99% of the land area, is the smallest, with only 14 barangays. CSJDM has the most barangays at 62, followed by Malolos with 51. Despite its size, DRT has the fewest barangays, with only eight. Malolos is situated along the coast, Guiguinto and Balagtas lie in the lowlands, and both CSJDM and DRT are in the upland areas.[20]

As of the 2020 census, Bulacan had a population of 3,708,890, making it the most populous province in Central Luzon. The province accounts for 3.41% of the national population and 29.85% of the regional population. Between 2015 and 2020, Bulacan's population grew at a rate of 2.54%, exceeding both the national (1.63%) and regional (2.17%) growth rates. Bulacan also has the highest population

density in the region, with 1,332 people per square kilometer. CSJDM, the largest city by population, is home to 17.57% of Bulacan's residents and 5.29% of the regional population. The population growth can also be attributed to the fact that Bulacan is a "receiving province" for migrants from other parts of the country.[21]

Marinduque

The island province of Marinduque, classified as a fourth-class province, has Boac as its provincial capital. Boac covers 212.70 square kilometers, making up 22.33% of Marinduque's total land area. According to the 2020 Census, the municipality had a population of 57,283, representing 1.77% of the MIMAROPA Region's total population and 23.95% of Marinduque's population. Boac is composed of 61 barangays. Among these is Boton, which had a population of 304 as of the 2020 Census, accounting for 0.53%. Boton is one of the barangays in Boac. As of the 2020 Census, Boton had a population of 304, accounting for 0.53% of Boac's total population. The residents of Boton are primarily engaged in agriculture and livestock. They cultivate crops such as coconut, rice, banana, root tubers, legumes, and vegetables. Livestock raised in the barangay includes cattle, carabao, swine, piglets, goats, chickens, and ducks.[22]

Quezon City

Quezon City is a highly urbanized city in the National Capital Region and the most populous city in the Philippines. It covers 171.71 square kilometers and accounts for 21.95% of the total population of Metro Manila. The city is subdivided into 142 barangays. Among these is Matandang Balara with a population of 69,475, according to the 2020 Census, accounting for 2.35% of Quezon City's total population.[23] The two *sari-sari* stores included in the study were from Zuzuarregui, located near condominiums and townhouses, and Feria, a community predominantly inhabited by low- to lower-middle-class residents.

Rizal

Rizal is a first-class province in the CALABARZON Region, located east of Metro Manila. It covers a total land area of 1,182.65 square kilometers and represents 20.56% of the total population of the region. Rizal is composed of 13 municipalities and 1 city. The municipality of Rodriguez, formerly known as Montalban, has a total land area of 172.65 square kilometers and a population of 443,954 as of the 2020 Census. This study focuses on Barangay San Isidro, which had a population of 159,612 in the 2020 Census, accounting for 35.95% of Rodriguez's total population. The most recent data from 2020 reflects a population increase of 42,335 individuals, representing a growth rate of 6.70%.[24] This growth may be attributed to the establishment of relocation centers in the area, drawing migrants to San Isidro from both nearby cities and distant provinces.

Site Selection

The province of Bulacan is located in the northern part of the National Capital Region (NCR) and links the other provinces in the extreme northern part of Luzon Island. Rizal is adjacent to NCR to the east. Moreover, Marinduque is an island part of Luzon in Region 4B (MIMAROPA) that is six (6) hours away from Metro Manila. The geographic distances of Bulacan and Rizal to NCR, contrasted with the relative remoteness of Marinduque, introduce important nuances in socioeconomic conditions, healthcare access, and urban planning.

The limited presence of *sari-sari* stores selling over-the-counter medicines in the areas of Bel-Air and Poblacion in Makati City, as well as Katipunan and Fairview in Quezon City, highlights notable disparities in urban development and healthcare access. In these areas, strict zoning regulations and the dominance of formal pharmaceutical establishments limit the presence of informal distribution channels. This urban characteristic contrasts sharply with provinces like Bulacan, where *sari-sari* stores remain integral to community health needs.

The variation in *sari-sari* stores reflects a spectrum of socio-economic and cultural differences across urban, peri-urban, and rural areas. In provinces such as Bulacan and Marinduque, *sari-sari* stores are widely regarded as reliable and accessible sources of affordable medicines within the community. Their presence responds to local demand for proximity and convenience, highlighting the significance of localized solutions in public health strategies.

Study sites were purposefully selected to capture variation across rural, peri-urban, and urban settings, as well as different socioeconomic contexts. Barangays and remote communities were selected for their abundance of *sari-sari* stores, whereas metropolitan areas were included to capture urban contexts characterized by more formalized pharmaceutical access.

Data Collection, Processing, and Analysis

The study draws on ethnographic insights from key informant interviews with fourteen (14) *sari-sari* storeowners or *tinderas*. Thematic saturation was considered sufficiently achieved as no substantively new themes emerged in the later interviews and previously identified categories were repeatedly confirmed across participants. The participants were recruited through snowball sampling, beginning with the researchers' initial networks, who subsequently recommended additional contacts that met the study's inclusion criteria. Interviews were conducted from February to March 2025 in the *tinderas*' stores. A semi-structured interview guide was developed, involving questions concerning the types of medicines sold, perceived efficacy, and comparisons with formal pharmacies.

The interview sessions were audio-recorded with the verbal consent of the participants, lasting between ten (10) and fifteen (15) minutes. The recordings were transcribed, with

the transcripts using identification codes in place of names and other identifying details. Transcripts were subsequently destroyed after transcription.

Thematic analysis was employed to analyze the qualitative data gathered, with the transcripts subjected to several rounds of coding and finalized through consensus among the team members. The collaborative coding process and consensus-building served as strategies to enhance the trustworthiness and credibility of the analytic interpretations. Direct quotes were used in the study, complemented by their English translations.

Ethical Considerations

Ethical approval for the study was obtained from the College of Social Sciences and Philosophy Ethics Review Board (CSSP-ERB) of the University of the Philippines Diliman.

RESULTS

Demographic Characteristics

The majority of the participants identified as female at birth (n = 10, 71%) and are aged 60 and above (n = 5, 37%). Most participants' household size ranges from 2 to 4 (n = 9, 63%), and the dominant store age is between 1 and 5 (n = 6, 43%) and 6 to 10 (n = 6, 43%), respectively (Table 2).

Selling Common Medicines for Common Illnesses

Many of the medicines sold in *sari-sari* stores are over-the-counter medicines. When asked, *tinderas* can often name the medicine brands at the top of their head, often coupled with the medicines' function (Table 3).

Table 2. Distribution of Participants according to Sex Assigned at Birth, Age, Household Size, and Sari-sari Store Age

Characteristics	n (%)
Sex assigned at birth	
Female	10 (71)
Male	4 (29)
Age group (years)	
20 – 29	1 (7)
30 – 39	2 (14)
40 – 49	3 (21)
50 – 59	3 (21)
60 and above	5 (37)
Household size	
2 – 4	9 (63)
5 – 10	5 (37)
Store age	
1 – 5	6 (43)
6 – 10	6 (43)
25 – 30	2 (14)

Table 3. Medicine Brand Names Cited

Medicine brand name cited	Generic Name	n (%)
Biogesic	Paracetamol	12 (86)
Mefenamic	Mefenamic Acid	9 (64)
Neozep	Phenylephrine HCl Chlorphenamine Maleate Paracetamol + Zinc	8 (57)
Diatabs	Loperamide	7 (50)
Alaxan	Ibuprofen + Paracetamol	5 (36)
Medicol	Ibuprofen	5 (36)
Paracetamol	Paracetamol	4 (29)
Tuseran	Dextromethorphan HBr Phenylpropanolamine HCl Paracetamol	4 (29)
Bioflu	Phenylephrine HCl + Chlorphenamine + Maleate + Paracetamol	4 (29)
Imodium	Loperamide	4 (29)
Amoxicillin	Amoxicillin	4 (29)
Solmux	Carbocisteine	3 (21)
Dolfenal	Mefenamic Acid	2 (14)
Buscopan	Hyoscine N-butylbromide	2 (14)
Advil	Ibuprofen	2 (14)
Cephalexin	Cephalexin	2 (14)
Decolgen Forte	Phenylpropanolamine Hydrochloride + Chlorphenamine Maleate + Paracetamol	2 (14)
Kremil-S	Aluminum Hydroxide Magnesium Hydroxide Simeticone	2 (14)
Pambatang Solmux	Carbocisteine	1 (7)
Rosuvastatin	Rosuvastatin	1 (7)
Pambatang Paracetamol	Paracetamol	1 (7)
Cotrimoxazole	Cotrimoxazole	1 (7)
Azithromycin	Azithromycin	1 (7)
Vitamin C (syrup for children)	Ascorbic Acid	1 (7)
Acetylcysteine	Acetylcysteine	1 (7)
Flanax	Naproxen Sodium	1 (7)
Saridon Triple Action	Paracetamol + Propyphenazone + Caffeine	1 (7)
Lomotil	Diphenoxylate and atropine	1 (7)
Aspilets	Aspirin	1 (7)
Bentyl	Dicyclomine	1 (7)
Polymagma	Attapulgite	1 (7)
Kiddilets (Chewable Tablet)	Paracetamol	1 (7)
Mag-asawang gamot	Chloramphenicol and Paracetamol	1 (7)

Tinderas underscored how the medicines that they sell are only 'common' medicines meant to treat 'common' conditions, such as *sakit sa ulo* (headache), *sakit sa tiyan* (stomach ache), *ubo't sipon* (coughs and colds) at *trangkaso* (flu). These medicines were described as "*para sa mga sakit na dumadapo sa atin*" (KII 3) at "*pang-araw-araw lang*" (KII 4).

KII 14: *Ito ay pangkaraniwang ginagamit ng mga tao.*

(**KII 14:** These are what are commonly used by the locals.)

Participants explain that the medicines they sell are for the common sicknesses that their family and their neighbors experience, such as headache, diarrhea, and fever.

Extending Personal Resources to the Community

Most storeowners shared how they initially bought medicines for themselves and their families:

KII 2: *Kasi nung araw, dito sa lugar na 'to, [...] remote. Ibig sabihin, napakalayo sa labasan, magtatricycle ka pa. Kaya nag-i-stock din ako ng [mga gamot]. [...] 'Pag may bumili, e 'di pagbibibilhan ko. 'Pag wala, e 'di akin. Pansarili talaga 'yan.*

KII 5: *Marami talaga kami na iba-iba. Kasi iyan, just in case. Sa totoo lang, kaya ako nagkaroon niyan. Just in case of emergency, mayroon kaming sarili. Hanggang sa sinabi ko kay Mommy, alam mo Mommy, ibenta mo na rin, para just in case. Dinagdagan niya na, so paninda na rin.*

(**KII 2:** Back in the day, this place was remote. You had to take a tricycle to go outside. That's why I stock up [on medicines]. If someone buys, I have something to sell. If there's none, then I'd use it for myself. It's really intended for my own use.

KII 5: We have many various medicines. You know, just in case. In reality, we have these medicines just in case of an emergency, so we can use it for ourselves. Until I told my mom to sell them, just in case [someone buys]. She bought more, so now we sell them.)

Tinderas then decided to extend these 'resources' to the community. Several *sari-sari* stores initially did not sell medicines, but eventually decided to stock up when asked about it by their customers. The term often used by participants is *"hinahanap"* (sought), which they claim is what ultimately drove them to start selling them:

KII 6: *Weeks lang [after itayo 'yong sari-sari store, nagbenta na kami ng gamot]. Kasi may naghanap agad na taga-rito rin.*

(KII 6: Just weeks after [we opened the *sari-sari* store, we started selling medicines]. Because a resident here started looking for them.)

The resources shared by *tinderas* to the community do not merely end at medicines. They also impart advice to their customers, based on their personal experiences. One participant shared how his wife, who also manages the store, draws from her experience as a mother in sharing suggestions:

KII 2: *Si Misis, nag-aalaga siya sa anak namin. Nagkaroon na siya ng experience sa mga gamot na dapat kung ano 'yong sakit, kasi nagtatanong ang customer kung ano ba ang mahusay na gamot.*

(KII 2: My wife takes care of our kid. She has experience with which medicines should be used for which illness, since customers sometimes ask which medicines are effective.)

Meanwhile, one *tindera* shared how customers would often ask her questions about their conditions, and how she responds based on her knowledge:

KII 7: *"Ate, ano po ba 'yong gamot sa ganito? [Ano] tamang gamot sa sipon tsaka sa lagnat? P'wede ko bang pagsabayin ang Neozep tsaka Biogesic?" Sabi ko hindi, pareho lang naman silang Paracetamol e. [...] Mag-ooverusage ka kapag sabay. Iyon, mga ganon lang [ang tinatanong]. "Ate, ano po ang [gamot para sa] sakit sa puson?"*

KII 7: "*Ate,* what medicine can be used for this [illness]? [What is] the proper medicine for runny nose and for fever? Can I take Neozep and Biogesic at the same time?" I tell them no; they're both Paracetamol. You'll over-use it if you take them at the same time. Those kinds of questions. "*Ate,* what medicine should be used for abdominal pain?"

They also offer advice that would complement the use of medicine:

KII 14: *Alam na nila ang gamit ng mga gamot. Pangkaraniwan na kasing ginagamit. Siguro… gumamit din ng herbal."*

(KII 14: They already know the uses of medicines because it is commonly used. Maybe I'd advise them to also consider using herbal.)

KII 14 is a farmer, and Boton is a very agricultural community. There is an abundance of herbal medicines in the locality, and she is keen on educating younger families on how to use them.

Despite this, it is evident that *tinderas* are wary not to cross any boundaries. Without prompting, they would repeatedly articulate that they are *not* pharmacies, and serious illnesses must be directed to 'real' pharmacies:

KII 6: *Okay na ako sa gamot [na mayroon sa tindahan], kasi iyon lang naman madalas hinahanap. Kapag mga antibiotics na kasi, sa drugstore na sila dapat.*

KII 1: *Sabi ko, mas ano rin, na magtanong pa rin sa doktor. Mahirap din 'yong self-prescribe eh.*

KII 8: *Wala na [akong ibang pinapayo], kasi hindi naman po ako doktor.*

(**KII 6:** I'm okay with my selection of medicines at the store, since these are what are often sought. If you want antibiotics, go to the drug store.

KII 1: I told them that it's still best to consult a doctor. It's hard to self-prescribe.

KII 8: I don't give any more advice since I'm not a doctor.)

Distinguishing the *sari-sari* store from 'real' pharmacies

The dominant sentiment of *tinderas* is that there is no difference between the medicines they sell and those sold by pharmacies, given that they often acquire their products from these pharmacies. This lends to the perceived effectiveness of their medicines:

KII 14: *Mabisa naman (ang mga gamot) kasi gumagaling agad.*

(**KII 14:** The medicines are effective because they get well immediately.)

Only a minor difference was raised by one participant– the price:

KII 1: *Parang pareho lang eh. Mas mura nga lang. Minsan kasi, 'pag branded lalo sa Mercury, mahal 'yon.*

(**KII 1:** It's more or less the same. Although we sell cheaper medicines. Sometimes, when medicines are branded, especially in Mercury [Drug], it's more costly.)

There is, however, a strong assertion that they are *not* pharmacies, and have no intention of masquerading as one. This is reflected in the kinds and quantity of medicines they sell:

KII 1: *'Yong normal [na gamot lang], kasi hindi naman kami pharmacy. [...] Talagang tamang [dami ng gamot] lang, hindi 'yong maramihan talaga. Kasi baka magmukha na kaming pharmacy.*

(**KII 1:** We only sell normal medicines since we're not a pharmacy. We only sell the right amount; we don't sell in bulk. We don't want to look like a pharmacy.)

There is also an emphasis on not selling antibiotics– or, in the case of one participant, 'strong' antibiotics– stating the dangers of acquiring them without prescription:

KII 1: *[Kapag] kakaibang antibiotic kasi, talagang kailangan ng reseta. Normally talaga, ang antibiotic kailangan ng reseta.*

KII 2: *'Di ko binebenta dito 'yong Amoxicillin. Bawal kasi 'yon. [...] Kasi kailangan may reseta. At kailangan syempre... Iba kasi pag-uminom ng isa. Kaya bawal 'yon. 'Pag uminom ng isa, lalo nagiging active. Virus 'yata 'yon. Kailangan pag umiinom ka non, mga 7 days. Bawal yun [ibenta]. Kailangan yun sa botika yun. May reseta ka.*

KII 7: *Actually, may mga nagbahanap ng antibiotics. Kaya lang kasi advocate ako ng proper usage ng antibiotics. So hindi, hindi ako nagbebenta ng ganon.*

(KII 1: For unique antibiotics, a prescription is needed. Normally, antibiotics require a prescription.

KII 2: I don't sell Amoxicillin. That's not allowed. A prescription is needed. And of course, it's different if you take just one. That's why it's not allowed. When you take just one, it becomes more active– the virus, I think. When you take antibiotics, it should be for 7 days. It's not allowed [to sell them]. It should be sold in pharmacies. You should have a prescription.

KII 7: Actually, there are people who look for antibiotics. But I'm an advocate for proper usage of antibiotics. So no, I don't sell them.)

An interesting case is the *sari-sari* store in Rodriguez, Rizal. They sell Rosuvastatin (a statin), antibiotics like Cotrimoxazole, Azithromycin, and Amoxicillin, and Acetylcysteine (mucolytic). When asked how they acquire these medicines, they said that a local pharmacy, approximately a kilometer away, sold it to them. When asked if they ask for a prescription, they said they do. This may be because they sold the medicine to the nearby home for the abandoned elderly. The household members also use some of the medicines. Rosuvastatin was used by the *tindero*, while the Pambatang Paracetamol and the Vitamin C are for their grandchildren, and they merely purchase extra bottles for the children in the neighborhood.

Bringing Medicines to the Masses

The responses of participants highlight how geography matters in terms of access to resources. Distance is a major factor considered by *sari-sari* store owners in deciding to sell medicines. In the present study's research locale, most stores and the surrounding community did not have a nearby pharmacy. This is especially true for sites within phases, villages, and subdivisions. As such, storeowners decided to sell medicines in their stores so that they can be within reach by the locals:

> **KII 3:** *Tulad ng mga kapitbahay natin, dinadatnan sila ng mga karamdaman. Ngayon kung pupunta pa sila ng labasan, e sasakay pa sila ng tricycle, magkano 'yong pamasahe. Samantalang kung dito lang. Okay na 'yong kumita kami ng piso, at least nakatulong kami sa mga kapitbahay.*
>
> **KII 14:** *Kapag [halimbawa] sumakit ang ulo mo o mga kapitbahay mo, mayroon nang mabibilhan sila. Kaysa pumunta pa sila ng bayan.*
>
> (**KII 3:** When my neighbors get sick, they'll have to go outside to buy medicine– ride a tricycle, pay for the fare. Instead of just buying here. We're okay with just earning a single peso from the sale, at least we helped our neighbors.
>
> **KII 14:** If [for instance], you or your neighbor experiences a headache, they would have a place to buy [medicines] instead of going to the town center.)

In the case of Duplas, a sitio in Barangay Kalawakan, DRT, Bulacan, the nearest pharmacy is located in the barangays of the next town: Malibay and Calumpang, San Miguel, Bulacan. They are seven and eleven kilometers away. There is no public transportation. One has to rent a motorcycle or own one to go to the plains. A one-way trip to the nearest town center costs over four hundred pesos. Some even opt to walk just to go to the said barangays.

Aside from distance, time is also a key consideration. One *tindera* shared that while there is a local pharmacy within their area, it closes at 10 PM, which he considers 'early':

> **KII 5:** *Eh ako, minsan hanggang 12 pa ako. Minsan hanggang may bibili.*
>
> **(KII 5:** My store is open until midnight. Sometimes up until there's a customer.)

This is echoed in the case of one of the stores in Quezon City. Although there are two local pharmacies just hundreds of meters away from their store, the neighbors find it convenient that they are open even late at night. One pharmacy is open 24/7; however, the residents of the neighborhood still have to walk a bit far.

Some storeowners have identified their most common clientele. One shared how her customers are mostly students. In fact, she started selling medicines in her store after the pandemic, when students started renting again in nearby dormitories and sought medicines in her store. Another participant stated that a portion of her customers are construction workers, as many were working in her village, while a *sari-sari* store located near townhouses of retirees offers pain relief medicines.

Another important point raised by storeowners is their tingi-tingi model. Locals often do not buy medicines in bulk but rather purchase them as needed. As a participant explained:

> **KII 5:** *Di ka naman makakabili sa botika ng iisang piraso.*
>
> **(KII 5:** You can't buy medicines from pharmacies by piecemeal.)

DISCUSSION

The study investigates the roles and perceptions of *sari-sari* stores as informal medicine providers. To the authors' knowledge, this is the first study that looks at *sari-sari* stores selling medicines in the Philippines. The present study seeks to contribute to the scant literature on these neighborhood retail stores and their role in community health.

Sari-sari stores abound in the Philippines, in both rural and urban areas. However, not all of these stores sell medicine—or at least not anymore. In the present study, the research locale was limited mostly to Bulacan due to the difficulty of finding *sari-sari* stores selling medicine in Metro Manila, where many of the authors are based due to their work. A potential reason behind this may be the burgeoning convenience store industry. By the end of 2024, 7-Eleven had established its 4,100th store.[25] *Sari-sari* stores and convenience stores are perceived similarly, with both providing vendible commodities to local customers. A key distinction between the two, however, lies in their target consumers: whereas convenience stores mostly cater to middle-class consumers, the majority of the working poor continue to rely on *sari-sari* stores for daily food and non-food purchases.[7]

More relevant, however, may be the enactment of the Philippine Pharmacy Act, which bars non-FDA-licensed retail drug outlets or pharmacies from selling medicines, including *sari-sari* stores. A key driver of this law is antibiotic misuse. In the Philippines, antibiotic misuse and antibiotic sharing are rampant, resulting in adverse reactions, waste of resources, treatment failures, and ultimately the rapid emergence of antimicrobial resistance.[26,27] Tan observed that antibiotics were used haphazardly even in common colds. On the other hand, completing a full course of antibiotics was rare because the medicine was described as too strong (*masyadong malakas*) and resulted in having "side effects."[28]

In the studies of Hardon in the late 1980's and early 1990's, she observed that "powerful drugs, that officially should not be sold to people without a prescription, were found to be available in small neighborhood stores (*sari-sari*)." She also raised how antibiotics and analgesics with dipyrone were sold then.[29] Barber et al. raised the concern that antibiotics, particularly beta-lactam antibiotics that include amoxicillin and cephalexin, were readily available in *sari-sari* stores in their research site in Central Visayas, some of which were past the expiration date.[30]

In the present study, only three participants were found to sell antibiotics, and only in a limited way (e.g., two of the three only sell cephalexin). The case study in Rizal is an example of a *sari-sari* store selling prescription medicine. They sell antibiotics such as Cotrimoxazole, Azithromycin, and Amoxicillin, as well as the mucolytic acetylcysteine and the statin rosuvastatin. In the conversation with the storeowner, it was found out that a local pharmacy was selling the medicines to them. Their relationship as fellow tenants in the *talipapa* (the local small market), where the storeowner also owns a *carinderia*, gives them access to the drugs. The vitamin C they sell is notably labelled "not for sale," suggesting that these are samples given by medical representatives, and underscoring the existence of an informal economy that enables such a trade.

Without prompting, many participants declared that they did not sell antibiotics and emphasized that prescriptions are needed to acquire them. This forms part of the *tinderas*' distinction of themselves and their roles. Contrary to the title of the present study, none of the participants actually saw their stores as community pharmacies. They distinguish themselves from pharmacies, from the kind and quantity of the medicines they sell to the limitations of what they can offer their customers.

Notably, *tinderas* commonly echoed dominant pharmaceutical narratives. They derive the effectiveness of the medicines they sell from the fact that these are sourced from pharmacies, claiming that it provides their medicines legitimacy. They also echoed popular knowledge such as the efficacy of Biogesic on an empty stomach ("*kahit walang laman ang tiyan*") and the preference for RiteMed. It is worth noting, however, that a point also repeated by participants is the view of generic medicines as inferior. In advocating for RiteMed, the *tindera* claimed that customers do not prefer generic drugs, and that RiteMed drugs are more effective, despite the fact that in pharmaceutical parlance, all drugs aside from the innovator drug are generic drugs.[31] Innovator drugs are drugs that are first created by a company and are usually patented by them when it first goes to the market. Further, these drugs serve as the standard for bioequivalence studies of generic drugs. The Generics Act of 1988 or RA 6675 requires these studies to ensure the safety and efficacy of generic medicines. With the enactment of this law and its empowerment by RA 9502 or the Universally Accessible Cheaper and Quality Medicines Act of 2008, health promotion and education, there has been increasing acceptance that generic drugs are as effective as innovative drugs.[32] However, beliefs on the inferiority of generic medicines persist, even among Filipino physicians.[33]

Some *sari-sari* stores offer multiple brands of medicines with the same generic name because some people prefer some brands over the others. Both Bioflu and Neozep were sold in one *sari-sari* store. They are both the same kind of drugs (Phenylephrine Hydrochloride + Chlorphenamine Maleate + Paracetamol). But some people prefer one over the other because they are *hiyang* (suitable). The concept of *hiyang* is associated with interactions between the individual, the illness (cause, type of symptoms), the drug (brand, dosage, dosage form, and price), and most importantly, the therapy's effect.[11]

Tan notes that, in the Philippines, the power of medicines is centered on cures. Medicine is good (*magaling*) if a patient has recovered from illnesses (*gumaling*). It is effective (*mabisa*) when they experience healing manifested in changes in the body. An analgesic is effective if the headache is dealt with (*nawawala na ang sakit ng ulo)*. A cough medicine is effective when phlegm is expelled *(lumalabas ang plema)*. If there is a relief from a symptom, the medicine consumer might say *gumiginhawa na ang pakiramdam*.[34]

Kleinman distinguished among three overlapping sectors of health care found in any complex society: the popular sector composed of social networks, family, and the community; the folk sector comprising traditional healers; and the professional sector, involving biomedical providers.[35] It is difficult to conclusively situate where the *tindera* fits in this Venn diagram, should they take their place at all. The most that can be derived from the present study is that *sari-sari* stores are central in the self-medication practice, falling under the popular sector.

Defined as the taking of drugs on one's initiative without the advice of a professional, self-medication is often problematized as an emerging health issue.[36] As mentioned previously, a common form of self-medication is antibiotic misuse, but it also encompasses the use of traditional and complementary medicine (T&CM), seeking help from folk healers, and recreational activities.[37] Self-medication is a fact of life in most lower- and middle-income countries.[38] In the Philippines, this is linked to *pagtitiis* (endurance of suffering). Lasco et al. found that due to insufficient funds, Filipinos often endure the illness instead of seeking professional care, sometimes resorting to self-medication.[39] Evidently, buying medicines by *tingi* in the *sari-sari* store to manage your symptoms is significantly less costly than seeking professional help.

Hardon, as cited by Nichter and Vuckovic, argued that self-care of common ailments promotes independence and enhances primary healthcare.[40] Increased awareness of medicine availability may also lessen reliance on expensive or scarce medical professionals who have an interest in making sickness seem more mysterious. They also posed a question,

however, if self-care decisions are really empowering or if they are dictated by factors like marketing strategies and influences of pharmaceutical companies over medical professionals and the media.

Self-medication, inasmuch as it is a growing public health challenge, is also a survival strategy for the ordinary Filipino. This brings to the fore the reality of health as inextricably a class issue. Major health issues– from health financing to health systems– can all be traced to access to health.[41] The poor bear higher healthcare needs, yet utilize health services the least.[42] Health remains inequitable in the Philippines, resulting in poor, avoidable, and ultimately unjust health outcomes. Addressing these disparities requires not only improving access, but also confronting the underlying socioeconomic factors perpetuating these inequities. The "thinginess" of medicine gives empowerment to heal, to alleviate suffering, and to have hope.[43]

Limitations

This study has several limitations. First, the predominance of study sites in Luzon, along with the relatively small overall sample, may limit the transferability of the results to other regions of the Philippines, such as Visayas or Mindanao, which may have different socioeconomic conditions and informal medicine distribution networks. Second, only a few metropolitan areas were included, which may not fully represent highly regulated urban environments where formal pharmaceutical establishments dominate and informal *sari-sari* store networks are minimal. Additionally, the relatively brief duration of interviews may have constrained the depth of data collected, though thematic richness was nonetheless achieved. Despite these limitations, the results serve as a useful starting point for examining *sari-sari* stores as informal providers of medicines.

CONCLUSION

The study surfaces the crucial role played by the *sari-sari* store in local healthcare practices in the Philippines. *Sari-sari* stores largely sell OTC medicines, often in small quantities, to meet the health needs of their community members, especially for 'common' ailments such as headaches, colds, and stomachaches. These stores provide affordable access to medicines through the tingi-tingi model, allowing customers to purchase only what they need. *Tinderas* also offer support to their communities by offering their customers personalized recommendations based on their own experiences and by remaining accessible in terms of proximity and hours. Nevertheless, *sari-sari* stores distinguish themselves from pharmacies and acknowledge their limitations in providing medical advice.

In pharmaceutical anthropology, the 'thinginess' or materiality of medicines is a crucial analytical characteristic; using this lens, *sari-sari* stores bring valued 'things' in close proximity to the people who look to them for healing and comfort.[43] Moreover, the *sari-sari* store, as a venue to observe interactions between the consumers, the government, and the medical and pharmaceutical world, shows us its social, political, and economic relevance. The present study further reveals that despite having evolved along with the country's changing pharmaceutical landscape, *sari-sari* stores remain central in the broader context of self-medication– a common and often necessary practice in the Philippines as a result of limited healthcare access and financial constraints. While these stores do not replace professional healthcare, they are found to fulfill an essential function in managing everyday health needs.

The present research acknowledges its drawbacks. The limited sampling design and sample size may inhibit the generalizability of the findings. The study would also benefit from gathering other demographic data such as education and income. Moreover, there remains a paucity of research on *sari-sari* stores in the Philippines, especially on their function as informal health providers. Future studies are highly encouraged to bridge this gap, conducting more in-depth ethnographic studies to follow how *sari-sari* stores figure in the 'therapeutic itineraries' of Filipino patients.[44,45]

Furthermore, the study recommends against blanket prohibitions and punitive measures. Measures such as exercising regulatory flexibility and increasing the accessibility of licensing for *sari-sari* store owners can be explored instead of launching crackdowns and buy-bust operations. Economic barriers must be considered in designing these interventions, as *sari-sari* store owners may lack financial resources to comply with training and licensing requirements, or even the luxury of time to leave their stores unattended. These interventions can be complemented by an education-driven approach, both for *sari-sari* store owners and consumers on responsible self-medication. Finally, the continued role of *sari-sari* stores as dispensers of medicines should be acknowledged and addressed in public health efforts towards improved pharmacovigilance.[46,47] Overall, our findings underscore the need for more nuanced policy-making that accounts for the socioeconomic realities that surround access to medicines, ensuring that policies and laws do not inadvertently restrict healthcare options for those who need them the most.

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All authors certified fulfillment of ICMJE authorship criteria.

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