The place of the “pharmacy” and “drug sellers” in LMICs: a scoping review

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Background

- Difficulties to access formal HS in Low- and Middle-Income Countries (LMICs)
- Alternative options to formal health providers
- Among 1st recourses = pharmacies & drug sellers

Playing *de facto* a key role in the health system functioning
Progressive recognition as a partner for primary care service delivery
Objective of the scoping review

To better understand the place and role of pharmacies and drug sellers in the broader context of changing health systems

- By identifying existing knowledge
- By clarifying key concepts related to the “pharmacy” and its connected professional groups
Key questions

What is the place of the pharmacy and drug sellers in the health system in LMICS?

Sub-questions

• Which different types of professional groups of “medicines sellers” have been identified and analysed in LMICs?
• How are those groups organised/articulated to the HS in LMICs?
• What are the relationships between those “medicines sellers” and other health care providers in LMICs?

Analysis at the crossroads of PH & social sciences (medical anthropology / sociology of professional groups)
Search strategy

**Databases** (February 2019)
- Medline via PubMed
- Sociological Abstracts et Psychinfo via Proquest
- Scopus

**Types of sources**
- Primary sources, with a priority given to peer-reviewed articles
- Secondary sources, mainly through the bibliographies of the identified articles
- Other sources: mainly grey literature (NGOs & IO) & “French speaking” databases

**Publication years**
Covering a period of 20 years: from 1999 to 2019
## Search equation – example from PubMed

<table>
<thead>
<tr>
<th>Thesaurus</th>
<th>OR</th>
<th>Common speech</th>
<th>AND</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>Pharmacy</td>
<td>Pharmacy OR pharmacies OR &quot;drug vendor(s)&quot; OR &quot;drug seller(s)&quot; OR &quot;medicine vendor(s)&quot; OR &quot;medicine seller(s)&quot; ETC.</td>
<td>LMIC(s) OR low and middle income country OR low and middle income countries OR + all countries by name</td>
<td>[Title/abstract]</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>Pharmaceutical Services</td>
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<tr>
<td>OR</td>
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<tr>
<td>Community Pharmacy Services</td>
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<tr>
<td>[Mesh]</td>
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</table>
Inclusion Criteria

Public – Concept – Context (PCC)

1) Public
   - Every person or setting that **sells** medicines, exclusively or not (broad definition)

2) Concepts
   - HSS & health delivery
   - Professional groups & issues
   - Medical and pharmaceutical anthropology
Inclusion Criteria
Public – Concept – **Context** (PCC)

3) Context

- LMICs
  - Based on the World Bank list of economies *(June 2018)*
  - Low & lower income countries included
  - Upper middle income countries excluded

- Rural, peri-urban & urban
Refining inclusion / exclusion criteria

- Very broad and inclusive search equations
- Difficulty to define precise inclusion criteria *ex ante*
- Iterative process
- Empirico-inductive approach
## Refining inclusion / exclusion criteria

<table>
<thead>
<tr>
<th>EXCLUSION CRITERIA</th>
<th>INCLUSION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic pharmacists, hospital pharmacist, hospital setting as main study group</td>
<td>Studies on the place/role/function of the community pharmacist/ drug seller /patent drug dealers within the health system</td>
</tr>
<tr>
<td>Pharmacy students as a study group</td>
<td>Studies on service delivery &amp; knowledge of the community pharmacist and drug vendors</td>
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<tr>
<td>Pharmacy curriculum &amp; formal education</td>
<td>Studies on pharmacovigilance or adverse drug reactions reporting from the community pharmacist or drug seller</td>
</tr>
<tr>
<td>Conducted in a developed country or upper middle-income country</td>
<td>Studies on availability, cost and affordability of medicines, only if direct link with the community pharmacy or drug seller</td>
</tr>
<tr>
<td>Studies with main topic related to pharmacoeconomics, pharmacy industry, cost-effectiveness, subsidized medicines</td>
<td>Studies relating to community pharmacists or drug vendors as a professional group, including issues of professional identity, motivation, including that of students, relationships with other professionals, professional development or training</td>
</tr>
<tr>
<td>Comparative countries between countries where one or more is a developed country</td>
<td>Medical or pharmaceutical anthropology (interactions, subjective perceptions, etc.)</td>
</tr>
<tr>
<td>Treatment practices &amp; health seeking behaviour of population not relating significantly to pharmacy</td>
<td>Studies relating pharmacy to public health</td>
</tr>
<tr>
<td>Others</td>
<td>Studies on health seeking behaviours that involve interactions with pharmacists or drug sellers, relating to why people go to pharmacy</td>
</tr>
</tbody>
</table>
IDENTIFICATION

Records identified through database searching
N = 9612
Proquest = 1549
PubMed = 2471
Scopus = 5592

Records identified after exclusion of duplicates
N = 7354

Records after double-blind screening based on titles & abstracts
N = 700

Selection

Decision to focus only on SSA
N = 382

Full-text articles assessed for eligibility
N = 444

Eligibility

Full-text excluded
N = 156
Full text unavailable = 80
Other = 31
Treatment practices or HSB not related directly to “pharmacy” = 15
Conducted in a developed or upper-middle income country / comparative studies = 12
Main topic related to pharmacoeconomics, pharmacy industry, subsidized medicines, cost-effectiveness = 8
Pharmacy curriculum = 5
Academic pharmacists, Hospital pharmacist, hospital setting as main study group = 4
Students as main study group = 1

Inclusion

Studies included after double-blind screening
N = 288
Trends – Health issues

- NCDs N = 18
- Antibiotics N = 19
- Medicines N = 19
- Malaria N = 76
- Public Health N = 11
- NA N = 59
- Others N = 27
- SSRR (FP, HIV, STI) N = 39
- Childhood diseases N = 20

Trends - countries

- SSA = 5
- LMICs = 9
- Multiple = 8
- Others = 36
Trends – setting / location

- Urban: N = 108
- Peri-urban: N = 14
- Rural: N = 53
- Both: N = 79
- Not clearly specified: N = 34
Trends – type of professional groups

« Medicine sellers »

Informal or unclear legal status

Some official recognition

Official Pharmacists

N = 65

Clients only = 7
Private providers in general = 9
Multiple combinations = 46

N = 51

N = 110

Drug or medicines stores/shops/outlets
Drug or medicines sellers/vendors/providers/retailers
Shop keepers
Informal providers
Itinerant drug vendors

Accredited Drug Dispensing Outlets
Proprietary and Patent Medicine Vendors
Registered Drug Shops
Licenced Chemical Sellers

Pharmacy in general
Retail pharmacy sector
Pharmacies/cists
Private pharmacies
Community pharmacies
Government-certified pharmacies
Licensed pharmacies
Pharmacy outlets
Pharmacy staff
Pharmacy students
Trends - Methods

- Quantitative: N = 184
- Qualitative: N = 37
- Mixed: N = 33
- Systematic / scoping reviews: N = 15
- Other: N = 19

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For any question / query

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