Assessing equity in the geographical distribution of community pharmacies in South Africa in preparation for a national health insurance scheme

Kim Ward,[a] David Sanders,[b] Henry Leng[b] & Allyson M Pollock[c]

Objective To investigate equity in the geographical distribution of community pharmacies in South Africa and assess whether regulatory reforms have furthered such equity.

Methods Data on community pharmacies from the national department of health and the South African pharmacy council were used to analyse the change in community pharmacy ownership and density (number per 10 000 residents) between 1994 and 2012 in all nine provinces and 15 selected districts. In addition, the density of public clinics, alone and with community pharmacies, was calculated and compared with a national benchmark of one clinic per 10 000 residents. Interviews were conducted with nine national experts from the pharmacy sector.

Findings Community pharmacies increased in number by 13% between 1994 and 2012 – less than the 25% population growth. In 2012, community pharmacy density was higher in urban provinces and was eight times higher in the least deprived districts than in the most deprived ones. Maldistribution persisted despite the growth of corporate community pharmacies. In 2012, only two provinces met the 1 per 10 000 benchmark, although all provinces achieved it when community pharmacies and clinics were combined. Experts expressed concerns that a lack of rural incentives, inappropriate licensing criteria and a shortage of pharmacy workers could undermine access to pharmaceutical services, especially in rural areas.

Conclusion To reduce inequity in the distribution of pharmaceutical services, new policies and legislation are needed to increase the staffing and presence of pharmacies.

Abstracts in عربي, 中文, Français, Русский and Español at the end of each article.

Introduction

Inequities in health and health-care are well documented in South Africa.[1–4] The well-funded private sector attracts the majority of the country's health professionals[5] and there is a shortage and maldistribution of key health-care workers, including pharmacists, across rural–urban and public–private sector divides.[6] South Africa's government is developing a national health insurance scheme with two objectives: to protect the poor from financial risks and to increase private sector participation.[7]

Until 1994, South Africa's private and public pharmaceutical services had been concentrated in urban metropolitan areas, where the majority of the country's middle- and upper-income citizens lived.[8] Post-apartheid national drug policy and regulatory interventions were designed to improve equity in access to medicines.[9–11] Although more than 80% of South Africans have access to free primary health care services and medicines from public sector clinics and community health centres (hereafter combined and referred to as "public clinics"), some prefer to use private community pharmacies (community pharmacies), where waiting times are shorter and services are more accessible.[6,12] The green paper for the national health insurance scheme has identified private community pharmacies as potential access points for medicines, in combination with public clinics.[7]

Community pharmacies represent two thirds of all pharmacies registered with the South African pharmacy council (SAPC); the remaining third comprises public institutional, manufacturing, wholesale, private institutional and consultant pharmacies.[6] Community pharmacies are classified as either corporate or independently owned. Corporate community pharmacies are owned by large public or private companies, such as supermarket chains with in-store dispensaries and chains with a pharmacy-only business. Corporate community pharmacies also own wholesale and distribution companies and many are acquiring courier pharmacies. Independent community pharmacies are generally owned and managed by one or more pharmacists. Most independent and corporate community pharmacies in both urban and rural areas deliver primary care services, such as chronic disease management, health education and promotion, maternal and child health care and immunization.[13] Some corporate community pharmacies are in partnership with provincial health departments to offer free family planning and childhood vaccination services.[14]

To operate in South Africa, a pharmacy must obtain a licence from the national department of health. The department of health issues one-off licences and enforces regulations that restrict the entry of community pharmacies, depending on need. The criteria are primarily distance from other dispensing services (not within 500 metres, with exceptions) and density (at most 2 community pharmacies per 10 000 residents, with exceptions for shopping malls and rural towns). Community pharmacies must be registered with the SAPC and comply with good pharmacy practice standards. Registration is renewed annually.[10]

[a] School of Pharmacy, University of the Western Cape, Private Bag X17, Bellville, 7535 Cape Town, South Africa.
[b] School of Public Health, University of the Western Cape, Cape Town, South Africa.
[c] Centre for Primary Care and Public Health, Queen Mary University of London, London, England.
Correspondence to Kim Ward (email: kward@uwc.ac.za).
(*Submitted: 11 September 2013 – Revised version received: 30 January 2014 – Accepted: 31 January 2014 – Published online: 9 May 2014*)

Several regulatory changes have been made to the Medicines and Related Substances Control Act, 1965,[11] and to the Pharmacy Act, 1974,[10] to promote the equitable distribution of pharmaceutical services and enhanced access to medicines. Section 22 A (15) authorizes pharmacists working in rural community pharmacies who have the necessary training, to diagnose ailments and prescribe medicines beyond their traditional scope of practice. The granting of such permits was suspended in 1998. In addition, dispensing licence regulations authorize doctors and nurses to deliver pharmaceutical services in areas where need can be demonstrated.[11] In 2003, the restrictions on pharmacy ownership with respect to the number of pharmacies owned and the qualifications of the owner were lifted and corporate community pharmacies were allowed to enter the market. Furthermore, licensing restrictions were introduced to control the geographical location of new community pharmacies.[10] The price of medicines in the private sector became strictly regulated.[11]

To monitor equity in access to health services, the World Health Organization (WHO) has recommended a model for assessing health service availability. In this model, the number of health care facilities, both public and private, per 10 000 residents is one of the prime indicators. WHO advocates monitoring this indicator down to the district level for a more accurate assessment of rural–urban clinic distribution.[15] Diminishing gaps between the most and least advantaged populations resulting from policy changes suggests that progress towards equitable distribution is being made.[16] South Africa's district health barometer monitors equity in primary health care provision – e.g. primary health care expenditure per capita, vaccine coverage, length of a stay in hospital, etc. – in 52 districts according to deprivation indices, a measure of poverty that includes assets, employment, education and living environment. The index ranges from 0 to 5, with the least deprived districts represented by < 1 and the most deprived by 5. However, the health barometer does not provide statistics on the densities of public clinics or any private facilities.[17]

The primary aim of this study was to examine changes in the ownership and geographical distribution of community pharmacies between 1994 and 2012 by using routine national data. We looked at the numbers of community pharmacies per 10 000 residents at the provincial level and in selected districts and interviewed national pharmacy experts about their perceptions of the extent to which current regulations improve the geographical distribution of community pharmacies. We summed community pharmacies and public clinics to assess their combined provincial distribution patterns against a South African benchmark of one clinic per 10 000 residents.[18]

Methods

Geographical distribution

Data source

Community pharmacy licence applications were obtained from the licensing unit of the department of health and community pharmacy registrations were acquired from the SAPC from November to December 2012, while community pharmacy registrations for 1994 were retrieved from published reports.[19] We found internal discrepancies in the data from the department of health licence database (May 2003 to December 2012) and identified fewer licences approved by the department of health than new community pharmacy registrations with the SAPC. Although SAPC data were deemed more reliable, they do not classify community pharmacies by ownership. Furthermore, their registers are routinely updated and exclude deregistered community pharmacies. For these reasons, for ownership trends we relied on a limited department of health application data set for 2008 to 2011; to assess new and existing registrations for 2012 we relied on the current SAPC register.

Data on public clinics were obtained from the national audit of health facilities.[20] Population mid-year estimates were sourced from the country's national statistical service.[21,22]

Data analysis

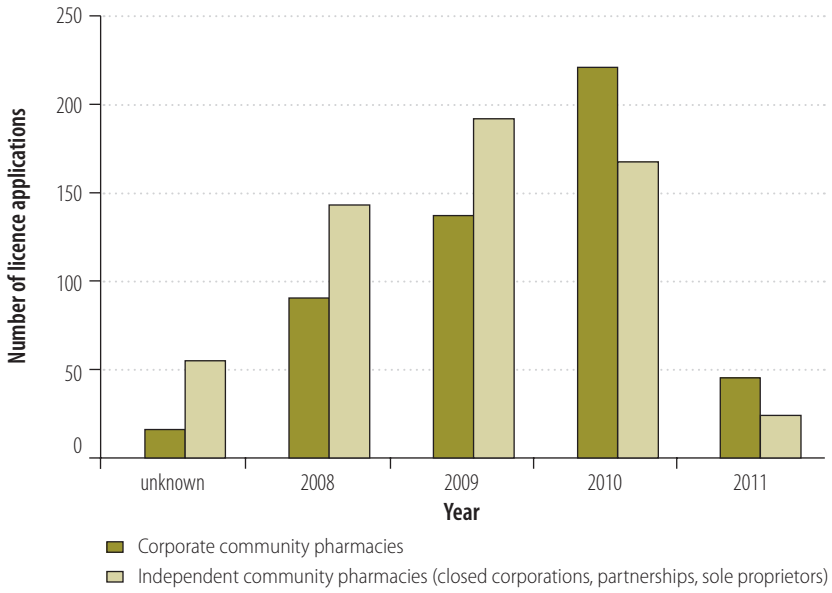
Facility density (i.e. number of facilities per 10 000 residents) at the provincial level was calculated from data on community pharmacy registrations and public clinics and from population data for the corresponding geographical areas. These were assessed for rural–urban disparities and against a benchmark of one clinic per 10 000 residents.[18] Community pharmacies were physically mapped and counted at the district level using district population data before computing community pharmacy densities.[21] For mapping purposes, community pharmacy searches in the national SAPC register (as on 21 November 2012) were run against compiled lists of cities, towns and suburbs in 15 districts (i.e. five districts each from the lowest, highest and middle quintile deprivation indices).[17] The mapping for each district was done independently by separate researchers and the findings were cross-checked for anomalies.

Pharmacy expert interview

We purposively selected nine national experts on pharmacy regulations and invited them to be interviewed for approximately two hours at their respective workplaces between March 2012 and August 2013. The interviews were unstructured and participants were asked to talk about their views on the impact of the regulatory reform on access to medicines and equity in such access. We piloted the interview with three practising community pharmacists and estimated empirically that eight participants would achieve data saturation. Consent to participate was given by all selected stakeholders. These were two rural pharmacists with section 22 A (15) permits who also represented pharmacies at the provincial and national levels; two directors of professional services for major supermarket pharmacy chains; four representatives of the Pharmaceutical Society of South Africa; and the chairperson of the Independent Community Pharmacy Association of South Africa. Ethical approval was obtained from the University of the Western Cape and the Director-General of Health at the national department of health.

Each interview was led by the principal investigator in the presence of one of the co-researchers. Interviews were transcribed from audio recordings and subsequently checked for accuracy against field notes and/or the original audio recording. Personal identifiers were removed from transcripts to ensure anonymity. The data were coded in a qualitative data analysis software MAXQDA (VERBI GmBH, Berlin, Germany), and themes were identified from the data by the research team.

Fig. 1. **Annual licence applications[a] for community pharmacies, South Africa, 2008 to 2011**



[a] $n = 1124$, excludes eight applications without an ownership classification.
Data source: Department of health licence database, applications by ownership category.

Results

Geographical distribution

Between 2008 and 2011, 1132 new community pharmacy licence applications, categorized by ownership, were recorded by the department of health. Fewer than 5% of them were rejected. Corporate community pharmacy applications increased from 94 in 2008 to a peak of 223 in 2010, and then dropped to 48 in 2011. Independent community pharmacy applications increased from 148 in 2008 to a peak of 197 in 2009 and dropped to 26 in 2011 (Fig. 1).

The total number of community pharmacies registered with the SAPC increased by 13% between 1994 and 2012 in the country as a whole and increased in all provinces except two (Table 1). However, the growth in community pharmacies did not keep pace with the 25% increase in population over the same period. Therefore, community pharmacy density fell in all but two rural provinces and one urban province.[23] The differences in community pharmacy density between the most rural and least rural provinces decreased from 1.3 per 10 000 residents to 0.72 per 10 000 residents between 1994 and 2012. However, in 2012 community pharmacy density was still higher in Gauteng and Western Cape, the two most urban provinces.

When community pharmacy density rates were compared against the deprivation index, we found a negative correlation and noted an eightfold difference between the most and the least deprived districts (OR Tambo and Cape Metropole, respectively) (Fig. 2).There were variations within provinces; OR Tambo, one of the most deprived districts of the Eastern Cape province, has 0.11 community pharmacies per 10 000 residents, while the average density of community pharmacies in the province is 0.34 (Table 1 and Fig. 2). The data also show large differences in community pharmacy density between districts with similar deprivation indices (Fig. 2).

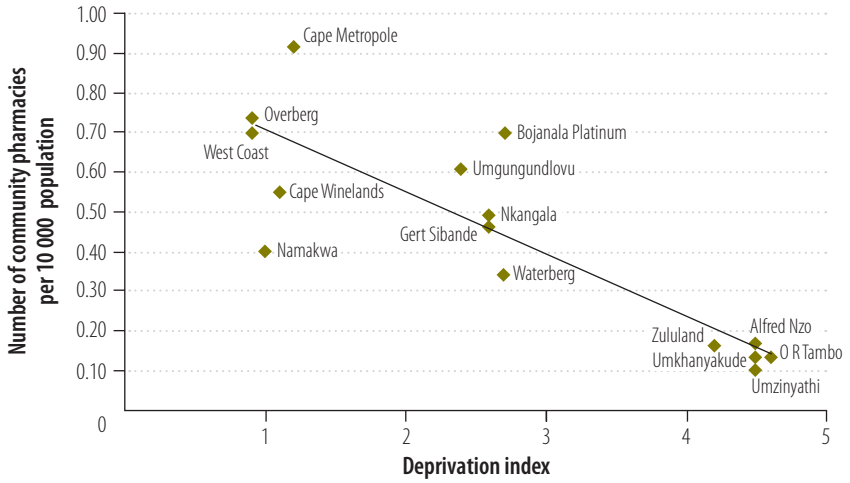
In 2012 there were large variations in the density of public clinics and community pharmacies between provinces (Fig. 3). The benchmark of at least one clinic per 10 000 residents[18] was only met in two provinces, but after pooling public and private facilities (on the premise that all community pharmacies could offer a defined package of primary health care services), all provinces met the benchmark at the provincial level. Pooling community pharmacies and public clinics also resulted in lower inequity in facility distribution between rural and urban provinces.

Table 1. **Changes in provincial community pharmacies and population between 1994 and 2012, South Africa**

Province (ranked from most to least rural)[a]	No. of registered community pharmacies[b]		Community pharmacy growth (%), 1994–2012	Population growth[c] (%), 1994–2012	Community pharmacy density[d]	
	1994	2012			1994	2012
Limpopo	76	143	88	1	0.15	0.27
Eastern Cape	267	228	–15	4	0.42	0.34
Mpumalanga	149	227	52	26	0.51	0.62
North West	153	204	33	6	0.62	0.58
KwaZulu-Natal	453	522	15	25	0.53	0.49
Free State	167	148	–11	7	0.61	0.50
Northern Cape	46	59	28	58	0.46	0.51
Western Cape	444	479	8	55	1.22	0.85
Gauteng	1005	1099	9	61	1.45	0.99
National	**2760**	**3110[e]**	**13**	**25**	**0.68**	**0.61**

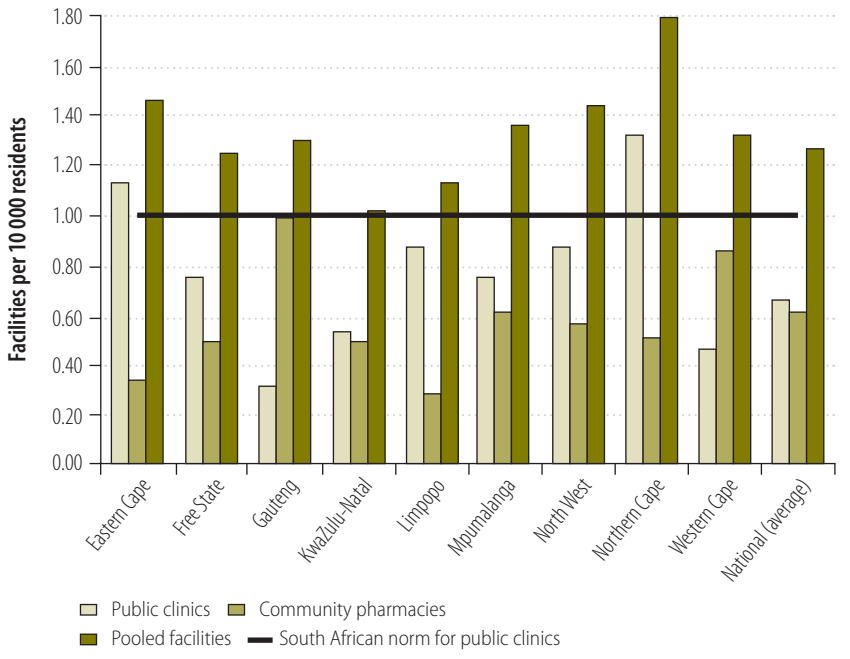
[a] Based on the rural percentage for each province reported by Statistics South Africa, 2001 census.[23]
[b] Source: L Gilbert (1994).[19] SAPC (2012).
[c] Source: Statistics South Africa (1994)[22] and Health System Trust (2012).[21]
[d] Number of community pharmacies per 10 000 residents.
[e] Excluding three community pharmacies not assigned to a province in the register.

Fig. 2. **The relationship between community pharmacy density and deprivation index[a] in 15 selected districts, South Africa, 2012**



[a] < 1 corresponds to the least deprived district and 5 to the most deprived.
Note: Number of community pharmacies per 10 000 residents.
Data source: community pharmacy data: SAPC register on 21 November 2012. Population data are district mid-year estimates for 2012.[21] Deprivation indices sourced from the District Health Barometer.[17]

Fig. 3. **Provincial density[a] of community pharmacies, public clinics and pooled facilities,[b] South Africa, 2012**



[a] Number of facilities per 10 000 residents.
[b] Pooled facilities include the numbers of registered community pharmacies and public clinics in 2012.
Data source: SAPC register on 21 November 2012. Population data are mid-year estimates for 2012.[21] Number of public clinics sourced from National Audit of Health Facilities, 2012.[20] South African benchmark.[18]

Perceptions surrounding regulation

Seven of the nine key informants felt that regulatory reform through lay ownership and licensing regulations has not reversed the inequitable distribution of community pharmacies. Six of the respondents criticized the government's failure to improve rural pharmaceutical services, evidenced by a lack of incentives to open community pharmacies, especially independent pharmacies, in these areas. One interviewee suggested that the government could easily provide incentives, such as minimal rent in a government building or to contract services to private community pharmacies – guaranteeing a certain income and with priority for contract renewal. Another respondent mentioned that "years back pharmacies opened in rural areas because the incentive was that they would get all district surgeons' prescriptions. That was a government policy but it was taken away just like that, without any consideration for these pharmacies and how they would survive. Most of these pharmacies then applied for a section 22 A (15) permit to survive in these areas […] and they play a massive role in providing these services."

According to a representative from a leading corporation, a problem for the company's future expansion into townships and rural areas is the conflict between profitability and the provision of pharmaceutical care.

Respondents held strong opinions about the apparent lack of enforcement of regulations on entry to the market. More than 50% (5/9) of interviewees were convinced that licences can be acquired through illegal means and a few questioned the authenticity of the department of health's licensing records. The majority of stakeholders criticized the licensing criteria for opening a new community pharmacy in shopping malls (i.e. a maximum of one community pharmacy per 50 000 visitors to the mall per month and not within a 500 m radius of an existing community pharmacy. One respondent expressed the view that "licensing has become a barrier … The Department of Health is not applying it like it should. Pharmacies should be sited, taking into account the health care needs, income groups, size of population and what is required to make a pharmacy viable."

Most respondents felt that pricing regulations have given companies (corporate and courier pharmacies) a competitive advantage over independent community pharmacies, many of which have closed down as a result. In addition, corporate businesses are able to have pharmacies within stores, which make it possible for pharmacy dispensaries to survive even if they make no profits.

Five of the nine respondents identified the inability to finance an independent pharmacy as an important barrier to the growth and expansion of the pharmacy sector. One interviewee

mentioned that "a pharmacy is no longer seen as an investment; it is very difficult to sell your pharmacy when you retire … There is no outside funding for new pharmacists to open pharmacies … In the past, the wholesalers would help to negotiate with banks and provide surety. The condition was that the pharmacy would use this wholesaler for purchases; at the time wholesaling was more profitable, but now it's not profitable at all."

All but one interviewee gave one or more reasons for considering it vital to support the independent community pharmacy market. Such reasons included independent community pharmacies' presence in high-, middle- and low-income areas; their willingness to serve all demographic groups and their dedication to the type of basic health services required in poorer areas.

When asked about challenges beyond regulatory reform, all respondents answered that human resource shortages are a major threat to community pharmacy growth. A respondent from a corporate community pharmacy put it this way: "The biggest challenge for us is obviously the availability of pharmacists and the availability of pharmacy support staff."

Discussion

Our study shows that monitoring trends in the distribution of community pharmacies is feasible and can be accomplished by combining key variables from the department of health licensing and SAPC registration databases, despite concerns about the quality of the data from these sources. The increase in the number of community pharmacies has not kept pace with population growth and there are differences between urban and rural provinces and between the most and least deprived districts. Although corporations have seen substantial growth, this has not resulted in improved density ratios or equity in distribution. Our empirical data are supported by the perceptions of key members of the pharmacy sector.

Ten years after deregulation opened the market to corporate businesses, community pharmacies in South Africa continue to be concentrated in urban provinces.[8] Our study is the first to demonstrate that even larger differences exist among districts than among provinces and that the least deprived districts have the highest community pharmacy densities. This shows that the health-care system has become more market oriented, with the result that areas with lesser need as a function of population size have greater access to medical care, a phenomenon known as Hart's inverse care law.[24] What this ultimately demonstrates is the failure of South Africa's neo-liberal policies to reverse inequities by expanding the private community pharmacy sector, despite legal restrictions for entering the market based on population size.[1] A European report based predominantly on qualitative data showed similar urban clustering following deregulation of the community pharmacy sector in countries such as England, Ireland and Norway. However, country-specific approaches, such as clauses or agreements with companies guaranteeing continued services in rural areas, improved access to community pharmacies.[25] In England, the implementation of market entry regulations reduced inequities in the geographical distribution of community pharmacies.[26]

The decline of new independently-owned community pharmacies is worrisome from the perspective of access to community pharmacies, particularly since these pharmacies are more likely to be established close to poor communities than corporate businesses. Corporate community pharmacies have gained a competitive edge over independent community pharmacies by reducing their operational costs and improving efficiencies in their supply chain through vertical integration. This allows them to sell medicines well below the maximum price stipulated in pricing regulations.[11] As such, they rely on a low price, high-volume business model and increased profits from other product lines in their stores to compensate for low profit margins from the dispensary. Contracting with the national health insurance could provide a lifeline for the independent community pharmacy industry.

In light of post-apartheid urbanization and of the failure of community pharmacy and clinic density to keep pace with population growth, the most expedient and short-term approach to improving the geographical distribution of pharmaceutical services may be to combine these facilities. However, this will not necessarily improve service availability because services might still be insufficient, especially in the public sector. A recent nationwide audit of public sector primary health care facilities revealed poor capacity and medicine availability in many rural areas.[27] Attention to such deficits is needed in plans to revitalize the country's primary health care.[7] Besides expertise and efficiencies in drug supply management, community pharmacies offer an opportunity to deliver expanded primary health care services through the reinstatement of section 22 A (15) permits and support for the proposed authorized pharmacist prescriber qualification, which allows pharmacists to diagnose and prescribe from the primary health care essential medicines list and the standard treatment guidelines.[28] Both are currently being reviewed by the department of health. The key informants of this study corroborated the findings from 1998 that in rural areas holding section 22 A (15) licences, community pharmacy utilization rates were high, especially among the poor.[12] With legislative support, this model could be adopted by all community pharmacies contracting under the national health insurance scheme to improve access not only to pharmaceutical services, but also to a defined package of primary health care services in urban and rural areas. The model could be piloted in one or more of the rural pilot districts where existing permit holders practise. This is in line with recommendations from countries with a policy of universal health coverage to pilot and plan interventions in underserved areas first.[29]

Conclusion

To improve the geographical distribution of community pharmacies, it will be necessary to urgently review licensing criteria and rural incentives to ensure that rural parts of the country and deprived areas attain the service density levels that exist in urban zones and in the least deprived areas. Furthermore, expanding service availability, in the event that services are combined, will require urgent action by the department of health to lift the suspension of section 22 A (15) permits. The department of health will also need to take action with respect to the national pharmacy workforce. In particular, strategies are needed to increase the number of pharmacy and pharmacy technician students in universities.[6] Finally, routine indicators, such as the number of community pharmacies and public clinics per 10 000

residents at the district level, should be published annually in the district health barometer to monitor strides towards achieving equity in the distribution of pharmacy services. ■

Acknowledgements
We thank our partners at the Swiss Tropical and Public Health Institute, University of Basel, Switzerland; the University of Edinburgh, United Kingdom of Great Britain and Northern Ireland; the University of Ghent, Belgium; Makerere University, Uganda; Mbarara University of Science and Technology, Uganda; the University of the Western Cape, South Africa, and the Foundation for Research in community Health, India.

Funding: This research was supported by the European Union Seventh Framework Programme Theme: Health-2009-4.3.2-2 (Grant no. 242262) under the title Access to Medicines in Africa and South Asia.

Competing interests: None declared.

ملخص

تقييم الإنصاف في التوزيع الجغرافي للصيدليات المجتمعية في جنوب أفريقيا في إطار التحضير لنظام التأمين الصحي الوطني

الغرض تحري الإنصاف في التوزيع الجغرافي للصيدليات المجتمعية في جنوب أفريقيا وتقييم ما إذا كانت الإصلاحات التنظيمية قد أدت إلى تعزيز هذا الإنصاف.

الطريقة تم استخدام البيانات حول الصيدليات المجتمعية التي تم الحصول عليها من إدارة الصحة الوطنية ومجلس صيادلة جنوب أفريقيا بغية تحليل التغير في ملكية الصيدليات المجتمعية وكثافتها (العدد لكل 10000 نسمة) في الفترة ما بين عامي 1994 إلى 2012 في كل المقاطعات التسع والمناطق الخمس عشرة المختارة. بالإضافة إلى ذلك، تم حساب كثافة العيادات العامة، وحدها ومع الصيدليات المجتمعية، ومقارنتها بأساس مرجعي وطني لعيادة واحدة لكل 10000 نسمة. وأجريت المقابلات مع تسعة خبراء وطنيين من قطاع الصيدلة.

النتائج ازداد عدد الصيدليات المجتمعية بنسبة 13 ٪ بين عامي 1994 إلى 2012 – بمعدل أقل من نمو السكان الذي بلغت نسبته 25 ٪. وفي عام 2012، كانت الصيدليات المجتمعية أعلى في المقاطعات الحضرية، وكانت أعلى ثمانية مرات في المناطق الأقل حرماناً عنها في المناطق الأكثر حرماناً. واستمر سوء التوزيع رغم النمو في الصيدليات المجتمعية المؤسسية. وفي عام 2012، حققت مقاطعتان فقط الأساس المرجعي عيادة واحدة لكل 10000 نسمة، رغم تحقيق جميع المقاطعات لهذا الأساس المرجعي عند ضم الصيدليات المجتمعية والعيادات. وأعرب الخبراء عن مخاوفهم من أن يؤدي نقص الحوافز الريفية ومعايير الترخيص غير الملائمة ونقص العاملين في القطاع الصيدلي إلى تقويض الوصول إلى الخدمات الصيدلانية، لا سيما في المناطق الريفية.

الاستنتاج للحد من عدم الإنصاف في توزيع الخدمات الصيدلانية، يتعين وضع سياسات وتشريعات جديدة لزيادة التوظيف ووجود الصيدليات.

摘要

评估南非社区药房地理分布的均衡性为发展全民健康保险计划作准备

目的 探讨南非社区药房的地理分布的均衡性，并评估监管改革是否促进这样的均衡性。

方法 使用国家卫生部和南非药剂师协会有关社区药房的数据分析 1994 年和 2012 年之间在所有 9 个省和 15 个选定的地区中社区药店所有权和密度的变化（每万名居民的数量）。此外，计算公立诊所（单独计算或加上社区药房）的密度，并与每万名居民一个诊所的国家基准进行比较。面访了药事领域的九位国内专家。

结果 在 1994 年到 2012 年间，社区药房数量增加 13%——低于 25% 的人口增长率。在 2012 年，城镇化程度高的省份社区药房密度较高，条件最好的地区比最缺医少药的地区的药房密度高八倍。尽管企业社区药店增加，但是依然存在分布不均。在 2012 年，尽管社区药房和诊所加在一起所有省份都达到每万人口一所，但是仅有两省达到每万人口一个药房的基准。专家们表达了对农村激励缺失、许可标准不当及药房工作人员短缺可能会阻碍人们获得优质服务的忧虑，在农村地区尤其如此。

结论 要减少药事服务分布的不均衡，需要新政策和立法来增加人员配备和药房数。

Résumé

Évaluation de l'équité dans la distribution géographique des pharmacies communautaires en Afrique du Sud en préparation d'un régime national d'assurance maladie

Objectif Étudier l'équité dans la distribution géographique des pharmacies communautaires en Afrique du Sud et évaluer si les réformes de la réglementation ont promu cette équité.

Méthodes Les données sur les pharmacies communautaires provenant du ministère national de la santé et de l'ordre des pharmaciens en Afrique du Sud ont été utilisées pour analyser les variations en matière de propriété et de densité (nombre pour 10 000 habitants) des pharmacies communautaires entre 1994 et 2012 dans l'ensemble des 9 provinces et dans 15 districts sélectionnés. En outre, la densité des cliniques publiques, seules et avec les pharmacies communautaires, a été calculée et comparée à une référence nationale d'une (1) clinique pour 10 000 habitants. Des entretiens ont été menés avec neuf experts nationaux du secteur pharmaceutique.

Résultats Le nombre de pharmacies communautaires a augmenté de 13% entre 1994 et 2012 – inférieur à la croissance de la population de 25%. En 2012, la densité des pharmacies communautaires était supérieure dans les provinces urbaines et était 8 fois plus élevée dans les quartiers les moins défavorisés que dans les quartiers les plus défavorisés.

La mauvaise distribution a persisté malgré la croissance des groupes de pharmacies communautaires. En 2012, seules 2 provinces ont atteint le taux de référence de 1 pour 10 000 habitants, bien que toutes les provinces aient réalisé cet objectif lorsque les pharmacies et les cliniques ont été combinées. Les experts craignent que l'absence d'incitations rurales, les critères inappropriés d'octroi de licence et une pénurie de personnel qualifié dans les pharmacies puissent nuire à l'accès à des services pharmaceutiques, en particulier dans les zones rurales.

Conclusion Pour réduire les iniquités dans la distribution des services pharmaceutiques, de nouvelles politiques et législations sont nécessaires pour augmenter les effectifs et la présence des pharmacies

Резюме

Оценка равномерности географического распределения аптек в сельских общинах Южной Африки в рамках подготовки к национальной системе медицинского страхования

Цель Исследовать равномерность географического распределения аптек в сельских общинах Южной Африки и оценить, способствовали ли законодательные реформы достижению такой равномерности.

Методы Для анализа изменений в структуре владения и плотности распределения аптек (количество аптек на 10 000 жителей) были использованы данные по общинным аптекам из Национального департамента здравоохранения и Совета по фармацевтической практике ЮАР за период между 1994 и 2012 годами по всем 9 провинциям и 15 выбранным районам. Кроме того, рассчитывалась плотность распределения государственных клиник как отдельно, так и совместно с общинными аптеками, и сравнивалась с национальным эталоном — одна клиника на 10 000 жителей. У девяти национальных экспертов из аптечной отрасли были взяты интервью.

Результаты Количество аптек в сельских общинах выросло на 13% за период между 1994 и 2012 гг. — что меньше, чем рост населения (25%). В 2012 году плотность аптек в сельских общинах была выше, чем в городских провинциях, и была в восемь раз выше в наиболее экономически развитых районах по сравнению с наиболее обездоленными областями. Неравномерность распределения сохранялась, несмотря на рост числа аптек в корпоративных сообществах. В 2012 году только две провинции удовлетворяли эталонному показателю наличия одной клиники на 10 000 населения, хотя все провинции достигали его при объединении количества клиник и общинных аптек. Эксперты выразили озабоченность тем, что отсутствие стимулов для развития сети аптек в сельской местности, неадекватные критерии лицензирования и нехватка аптечных работников могут затруднить доступ населения к фармацевтическим услугам, особенно в сельских районах.

Вывод Для уменьшения неравенства в распределении фармацевтических услуг необходимы новые стратегии и законы, позволяющие увеличить количество аптек и их персонала.

Resumen

La evaluación de la equidad en la distribución geográfica de las farmacias comunitarias en Sudáfrica para preparar un plan de seguro médico nacional

Objetivo Investigar la equidad en la distribución geográfica de las farmacias comunitarias en Sudáfrica y evaluar si los cambios legislativos han promovido dicha equidad.

Métodos Se utilizaron datos sobre las farmacias comunitarias del departamento nacional de salud y del consejo farmacéutico de Sudáfrica para analizar el cambio en la propiedad y la densidad de las farmacias comunitarias (número por cada 10 000 habitantes) entre 1994 y 2012 en las nueve provincias y los 15 distritos seleccionados. Además, se calculó y comparó la densidad de las clínicas públicas, por separado y con farmacias comunitarias, con un punto de referencia nacional de una clínica por cada 10 000 habitantes, y se entrevistaron a nueve expertos nacionales del sector farmacéutico.

Resultados El número de farmacias comunitarias aumentó en un 13 % entre 1994 y 2012 - un crecimiento inferior al de la población, que fue del 25 %. En 2012, la densidad de las farmacias comunitarias era más alta en las provincias urbanas, y era ocho veces mayor en los distritos menos desfavorecidos que en los más desfavorecidos. La mala distribución persistió a pesar del crecimiento de las farmacias comunitarias colectivas. En 2012, solo dos provincias cumplieron el punto de referencia de una farmacia por cada 10 000 habitantes a pesar de que todas las provincias lo lograron cuando se combinaron las farmacias comunitarias con las clínicas. Los expertos expresaron su preocupación ya que la falta de incentivos rurales, los criterios inadecuados para la concesión de licencias y la escasez de trabajadores farmacéuticos podrían debilitar el acceso a servicios farmacéuticos, especialmente en las zonas rurales.

Conclusión Con objeto de reducir la desigualdad en la distribución de los servicios farmacéuticos, es necesario desarrollar una legislación y políticas nuevas para aumentar la dotación de personal y la presencia de las farmacias.

References

1. Ataguba JE, Akazili J, McIntyre D. Socioeconomic-related health inequality in South Africa: evidence from general household surveys. Int J Equity Health. 2011;10(1):48. doi: http://dx.doi.org/10.1186/1475-9276-10-48
2. Ataguba JE, McIntyre D. Who benefits from health services in South Africa? Health Econ Policy Law. 2013;8(1):21–46. doi: http://dx.doi.org/10.1017/S1744133112000060
3. Coovadia H, Jewkes R, Barron P, Sanders D, McIntyre D. The health and health system of South Africa: historical roots of current public health challenges. Lancet. 2009;1(9692):11–28. doi: http://dx.doi.org/10.1016/S0140-6736(09)60951-X
4. Gilson L, McIntyre D. Post-apartheid challenges: household access and use of health care in South Africa. Int J Health Serv. 2007;37(4):673–91. doi: http://dx.doi.org/10.2190/HS.37.4.f PMID: 18072315
5. Human resources for health, South Africa. HRH strategy for the health sector: 2012/13–2016/17. Arcadia: Department of Health South Africa; 2011.
6. Pharmacy human resources in South Africa [Internet]. Pretoria: South African Pharmacy Council; 2011. Available from: http://www.e2.co.za/emags/phrsa/pageflip.html [cited 2012 Feb 21].
7. National Health Insurance in South Africa (Green Paper). Pretoria: Department of Health South Africa; 2011. Available from: http://www.hst.org.za/sites/default/files/2bcce61d2d1b8d972af41ab0e2c8a4ab.pdf [cited 2014 Feb 21].

8. Gilbert L. Your health is our duty, our commitment, our life's work: pharmacists in South Africa claim new ground. Soc Transit. 2004;35(2):302–18. doi: http://dx.doi.org/10.1080/21528586.2004.10419121
9. National drug policy for South Africa. Pretoria: Department of Health South Africa; 1996. Available from: http://apps.who.int/medicinedocs/documents/s17744en/s17744en.pdf [cited 2014 Feb 21].
10. Pharmacy Act of 1974 (Act no. 53 of 1974). Pretoria, South Africa.
11. Medicines and related substances control Act of 1965 (Act no. 101 of 1965). Pretoria, South Africa.
12. Gilbert L. Pharmacy's attempts to extend its roles: a case study in South Africa. Soc Sci Med. 1998;47(2):153–64. doi: http://dx.doi.org/10.1016/S0277-9536(98)00022-7
13. Gilbert L. Interprofessional care in South Africa: the expanding role of community pharmacy and the therapeutic alliance with nurses. J Interprof Care. 1999;13(2):175–88. doi: http://dx.doi.org/10.3109/13561829909025549
14. Western Cape Government [Internet]. Cape Town: Western Cape Government; c2014: Agreement between the Health Department and Clicks Set to improve access to health care [about 1 screen]. Available from: http://www.westerncape.gov.za/gc-news/413/9024 [cited 2014 Feb 21].
15. Monitoring equity in access to AIDS treatment programmes: a review of concepts, models, methods and indicators. Geneva: World Health Organization; 2010.
16. Braveman PA. Monitoring equity in health and healthcare: a conceptual framework. J Health Popul Nutr. 2003;21(3):181–92.
17. Day C, Barron P, Massyn N, Padarath A, English R, editors. District Health Barometer Year 2010/11. Durban: Health Systems Trust; 2012.
18. National Department of Health Strategic Plan 2010/11-2012/13. Pretoria: National Department of Health; 2010. Available from http://www.nationalplanningcycles.org/sites/default/files/country_docs/South%20Africa/south_africa_strategic_health_plan_2010-2013.pdf [cited 2014 May 05].
19. Gilbert L. community pharmacy in South Africa: a changing profession in a society in transition. Health Place. 1998;4(3):273–85. doi: http://dx.doi.org/10.1016/S1353-8292(98)00020-3
20. Annual health statistics 2012. Pretoria: National Department of Health; 2013.
21. Health System Trust [Internet]. Durban: Health System Trust; 2014. Population estimates: NDOH/HISP population estimates 2001-2016 [about 2 screens]. Available from: http://www.healthlink.org.za/indicators/Population /ZA_PopEst_2001_2016_With_PopPyramids_Feb_2010.7z [cited 2014 Feb 21].
22. Mid-year population estimates, 1995. Pretoria: Statistics South Africa; 1995. Available from http://www.statssa.gov.za/publications/P0302/P03021995.pdf [cited 2014 Feb 21].
23. Census 2001: Investigations into appropriate definitions of urban and rural areas for South Africa. Pretoria: Statistics South Africa; 2003.
24. Hart JT. The inverse care law. Lancet. 1971;1(7696):405–12. doi: http://dx.doi.org/10.1016/S0140-6736(71)92410-X
25. Vogler S, Arts D, Sandberger K. Impact of pharmacy deregulation and regulation in European countries. Vienna: Gesundheidt Osterreich GmbH; 2012.
26. Felix J. Inequality in the provision of community pharmaceutical services in England 1974–1999 [dissertation]. York: Centre for Health Economics, University of York; 2005.
27. Department of Health, South Africa. The national health care facilities baseline audit national summary report. Westville: Health System Trust; 2012.
28. South African Pharmacy Council. Scope of practice and qualification for authorised pharmacist prescriber (34428). Pretoria: Government Gazette; 2011.
29. The world health report 2008– primary health care: now more than ever. Geneva: World Health Organization; 2008.