

WHEN MEDICINES CAUSE MISERY

Public Health Services - An Overview

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Every family in India dreads a medical emergency. When a family member falls ill, we pay from our pocket - either we draw from our savings, sell assets or borrow. If one is poor, the options are either to forego care and die, or to get pushed to further destitution due to the costs. Children are taken out of school, women work longer hours to earn a little more, and make do with meagre meal(s). As families cope with health shocks, the vicious cycle of poverty and ill-health continues. Annually 55 million people in the country are pushed to poverty just to meet health bills - this is more than the population of 177 countries.

High Out-of-Pocket Medical Expenses

A health system dependent on household out-of-pocket (OOP) spending and market is iniquitous as access depends necessarily on affordability. Poor and marginalised are typically underserved in such situations. Further, as individuals we don't know the health care requirements for us - a phenomenon known as 'information asymmetry'.

This leads to inefficiencies in the form of irrational care, over-medicalisation and exploitations of various kinds. Moreover, good health is essential for complete development of society, to have capable citizens and a healthy work force - which in turn creates conditions for speedy growth. Moving away from a system dependent on OOP, governments recognise health as a merit good and bear the responsibility of providing health care in most countries. Access to health care is seen as a basic right of citizens. In many countries, tax money is used to provide services directly. In others, healthcare is organised through social insurance.

In India, government bears little more than a fourth (28.6%) of health spending; while households spend more than two-third (67.7%).¹ Public spending on health is particularly low in India compared to many neighbouring countries like Sri Lanka, China, Thailand and Malaysia. All the BRICS (Brazil, Russia, India, China & South Africa) countries spend more than 3 per cent of GDP on health, while spending in India is only 1.15 per cent. Almost entire household expenditure is in the form of direct payments at the time of availing services, which is known as OOP. Households spend very little on purchasing insurance - it remains limited to the richer sections of the society.

Table 1: Health Care Expenditure in India: 2004-05 and 2013-14

Indicators	2004-05	2013-14
Total Health Exp. (THE) as % of GDP	4.2	4.0
Total Govt. Health Exp. as % of GDP	0.96	1.15
Total Govt. Health Exp. as % of THE	22.5	28.6
Household Health Exp. as % of THE	71.1	67.7
OOPE as % of THE	69.4	64.2

Source: National Health Accounts India 2004-05 and 2013-14

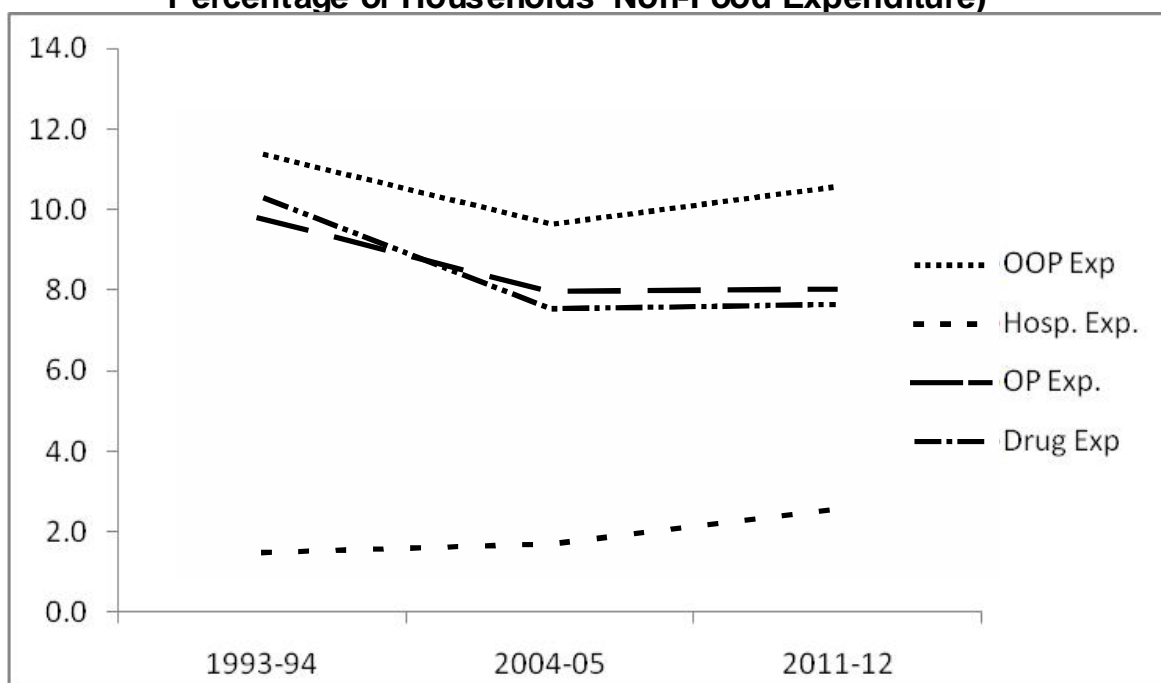
¹National Health System Resource Centre. (2016). National Health Accounts Estimates for India (2013-14). New Delhi: Ministry of Health and Family Welfare, Government of India

Health expenditure causes a major brunt in the household budget. Evidence from the National Sample Survey (2011–12) suggests that on an average, OOP constitutes approximately 6 per cent – 7 per cent of the total household consumption expenditure. This proportion is significantly higher in India as compared to a few developed and many developing countries (Xu et. al, 2003², 2005³, Doorslaer et. al., 2006⁴).

Health Expenditure: Some Figures

Existing studies have indicated that the poor in India are quite often required to borrow and sell off household assets to finance their healthcare needs (Mahal et al. 2001⁵; Peters et al. 2002⁶). As depicted in Figure 1, between 2004-05 and 2011-12, greater part of the household expenditure is being spent on health. A major part of this expenditure is on medicines.

Figure 1: Trends in Share of OOP Spending in India from 1993-94 to 2011-12 (As Percentage of Households' Non-Food Expenditure)



Source: Author's Estimate Based on NSSO Unit Records, Various Rounds

²Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJL. 2003. Household catastrophic health expenditure: A multicountry analysis. *The Lancet*; 362(9378):111-7

³Xu K, Evans D B, Carrin G and Aguilar-Rivera. 2005. Designing Health Financing System to Reduce Catastrophic Health Expenditure. Technical Briefs for Policy Makers, Number 2, WHO/EIP/HSF/PB/05.02, Geneva

⁴van Doorslaer E, O'Donnell O, Rannan-Eliya RP, Somanathan A, Adhikari SR, Garg CC et al. 2006. Effect of Payments for health care on poverty estimates in 11 countries in Asia: An Analysis of households' data. *The Lancet*; 368; pp.1357-64

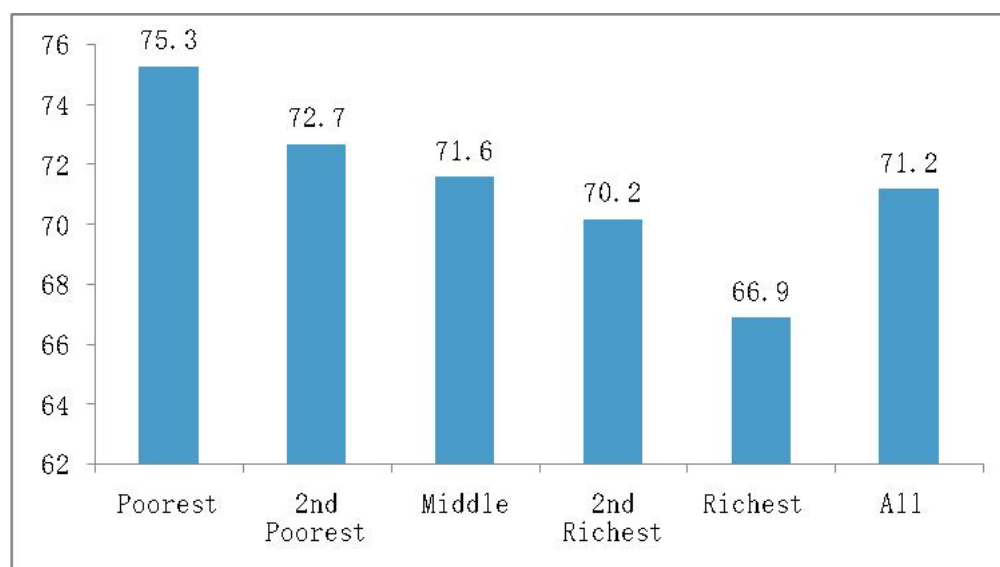
⁵Mahal, A, Singh J, Afridi F, Lamba V, Gumber A, and Selvaraju V. 2001. Who Benefits from Public Health Spending in India? New Delhi: National Council of Applied Economic Research.

⁶Peters DH, Yazbeck AS, Sharma RR et al. 2002. Better health system for India's poor: findings, analysis and options. Human Development Network, Health, Nutrition and Population series. Washington DC: The World Bank.

Expenditures on medicines have historically constituted a significant proportion of OOP, especially in low and middle-income countries (McIntyre *et al.* 2006⁷; Saksena *et al.* 2006⁸; Niens *et al.* 2010⁹). Numerous studies from India also demonstrate that medicine expenditure is a major driver of OOP, and consequent catastrophe and household poverty (Berman *et al.* 2010¹⁰, Karan *et al.* 2014¹¹; Garg and Karan, 2009¹²).

The most recent Indian study found that the poorest 20 per cent of households experienced a faster increase in the proportion reporting any OOP for outpatient care than the better off 20 per cent households. The study concluded that the financial burden of OOP increased faster among the more underprivileged groups, in comparison to their more privileged counterparts (Karan *et al.* 2014¹³). Another Indian study recommends that expenditures on drugs need special focus, expressly for the poor. As depicted in Figure 2, the share of medicines in total household health expenditure is higher among poorer households. This makes a strong case for greater attention towards protecting poorer households from the ill effects of medicines.

Figure 2: Share of Medicines in Households' OOP expenditure by Quintile Groups, 2011-12



Source: Extracted from Unit Level Records of 68th CES Round, NSSO

⁷McIntyre D, Thiede M, Dahlgren G, Whitehead M. 2006 What are the economic consequences for households of illness and of paying for health care in low- and middle-income country contexts? *Social Science and Medicine* 2006;62(4):858-65.

⁸Saksena P, Xu K, Durairaj V. 2010. The drivers of catastrophic expenditure: outpatient services, hospitalization or medicines? *World Health Report (2010) Background Paper, No 21*

⁹Niens LM, Cameron A, Van de Poel E, Ewen M, Brouwer WBF, et al. 2010. Quantifying the Impoverishing Effects of Purchasing Medicines: A Cross Country Comparison of the Affordability of Medicines in the Developing World. *PLoS Med* 7(8): e1000333. doi:10.1371/journal.pmed.1000333

¹⁰Berman P, Ahuja R, Bhandari L. 2010. The Impoverishing Effect of Healthcare Payments in India: New Methodology and Findings. *Economic & Political Weekly EPW* April 17, 2010 VOL XLV NO 16

¹¹Karan A, Selvaraj S, Mahal A. 2014. Moving to Universal Coverage? Trends in the Burden of Out-Of-Pocket Payments for Health Care across Social Groups in India, 1999–2000 to 2011–12. *PLoS ONE* 9(8): e105162. doi:10.1371/journal.pone.0105162

¹²Garg CC, Karan AK. 2009. Reducing out-of-pocket expenditures to reduce poverty: a disaggregated analysis at rural-urban and state level in India. *Health Policy and Planning* 2009;24(2):116-28

¹³Karan A, Selvaraj S, Mahal A. 2014. Op cit.

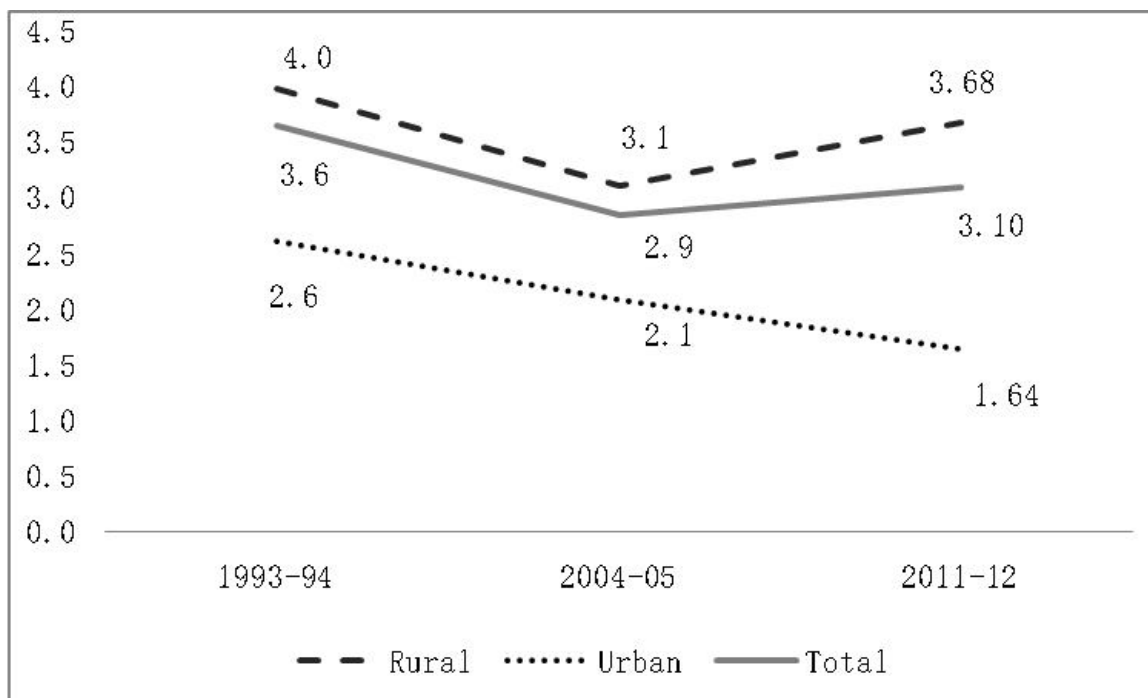
There is adequate evidence to indicate that because of the unpredictable nature of expenses on healthcare, also many non-poor households are plunged into poverty and those who are already poor are pushed further down (known as 'poverty deepening'; Doorslaer *et al.* 2006¹⁴). Using the nationally representative data from the consumer expenditure survey (CES) of the National Sample Survey Organisation (NSSO), Doorslaer *et al.* (2006) and Garg and Karan (2009) report that OOP caused approximately a 3.2 per cent increase in the poverty ratio in the year 2000. Shahrawat and Rao (2011¹⁵) report similar findings with additional information on higher increase in poverty among lower expenditure quintiles of households.

Using the health and morbidity survey data of the NSSO, Berman *et al.* (2010¹⁶) decomposed the poverty impacts of OOP into inpatient and outpatient expenses separately and reported that increase in poverty due to outpatient expenditure is significantly higher than what is due to inpatient expenditure.

Rampant Poverty in Rural Areas

As per NSSO data there is a considerable increase in impoverishment due to medicines between 2004-05 and 2011-12, particularly in rural areas. In rural areas around 3.7 per cent people fall below poverty line in order to pay for medicines.

Figure 3: Households Falling Below Poverty Line Due to OOP on Medicines (%): 1993-94, 2004-05 and 2011-12



The best way to provide financial protection from OOP on medicine is to provide free medicines from public facilities. Earlier it was a norm that whoever visits a government hospital gets prescribed medicines free. As part of the health sector reforms public spending was cut in the early 1990s. This resulted in sustained neglect of public health services and above all, a gradual withdrawal of medicine

¹⁴van Doorslaer E, O'Donnell O, Rannan-Eliya RP, Somanathan A, Adhikari SR, Garg CC *et al.* 2006 *op cit.*

¹⁵Shahrawat R, Rao KD. 2011. Insured yet vulnerable: out-of-pocket payments and India's poor. *Health Policy and Planning*, doi:10.1093/heapol/czr029, April 12, pp.1-9

¹⁶Berman P, Ahuja R, Bhandari L. 2010. *Op cit.*

supplies in the government health system, which has driven people away from public services.

People are forced to either access the private retail market for purchasing medicines or to opt out due to financial barriers (Baru 2003¹⁷; Selvaraj 2011; Mukhopadhyay 2012¹⁸). Medicine budgets shrank across the states since the early 1990s with the exception of Tamil Nadu, which recognised the importance of enhancing medicine supplies through the public health system.

Low levels of public spending have correspondingly led to a high OOP on medicines, which constitutes two-thirds of total spending on medicines. Across the states in India we find that the share of medicines decreases with the level of monthly per capita expenditure (MPCE).

However, Tamil Nadu remains an important deviation with lowest share of medicines. The OOP on medicines also cause significant impoverishment and intensity and its extent has increased significantly over the decades.

While the evidence is limited, available data from several India states demonstrates significant variations in the availability and stock-outs of essential medicines. For example, a survey of public facilities in Tamil Nadu and Bihar showed that the mean availability of a selected basket of essential medicines for Bihar was about 43 per cent as compared to 88 per cent for Tamil Nadu (Selvaraj, S et al 2011¹⁹).

On the other hand, a study by Cameron et al. noted that the median availability of critical medicines in the public health system was about 30 per cent in Chennai, 10 per cent in Haryana, 12.5 per cent in Karnataka, 3.3 per cent in Maharashtra (12 districts) and 0 per cent in West Bengal.

Several factors can influence the provision and use of essential medicines via the public health system, such as poor and incomplete stocking due to inadequate budgetary support; poor supply chain management leading to frequent stock-outs; prevailing prescription practices leading to inessential and costlier prescriptions for medicines from outside the public health system; and a lack of confidence in the quality of medicines supplied through the public system.

Tamil Nadu Model of Procurement and Distribution of Medicines

The various models of procurement and distribution of medicines and other medical supplies observed in different states of India are a function of the state's prioritisation of the issue, institutional capacity, demography and other factors. The Tamil Nadu Medical Services Corporation (TNMSC) established in 1995 is a model of centralised procurement and decentralised distribution through an autonomous procurement agency.

Though TNMSC has emerged as a model for many states, its replication was beset with hesitation in several states, hampering its full potential. Some state governments, and more recently the Union Government, have recognised the need to ensure availability of medicines through the public system.

¹⁷Baru, R. 2003. Privatisation of Health Services: A South Asian perspective. *Economic and Political Weekly*, 38(42) pp. 4433-4437

¹⁸Mukhopadhyay I. 2012. Public Health Care Expenditure in India: a Study of Kerala, Tamil Nadu and West Bengal, JNU, New Delhi, unpublished PhD thesis

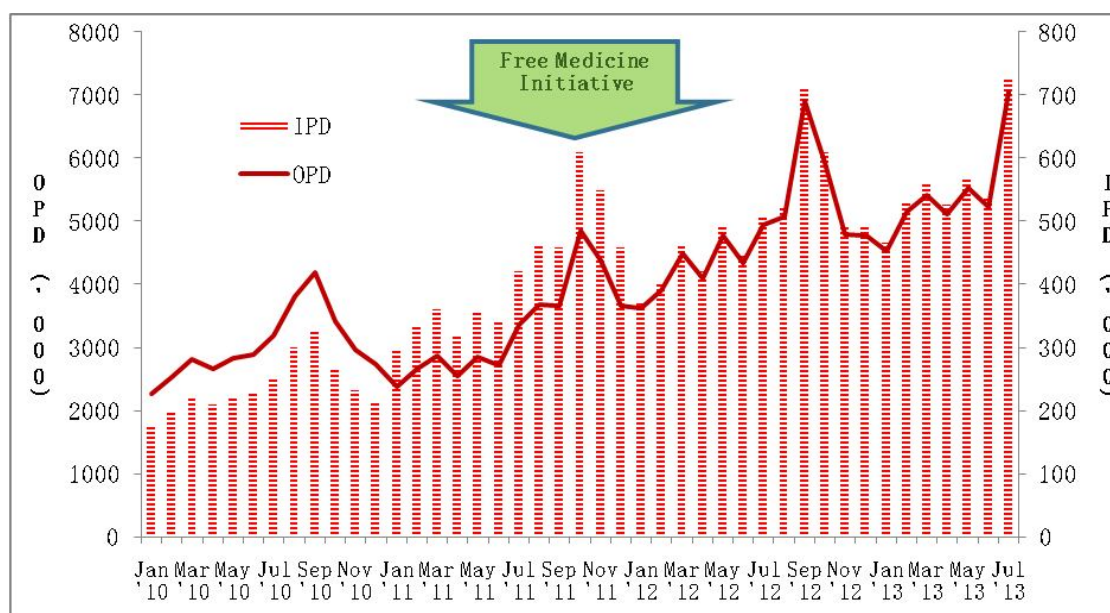
¹⁹Selvaraj S, et al. Improving governance and accountability of India's medicine supply system. New Delhi: Public Health Foundation of India;2011

Though several states attempted to duplicate the Tamil Nadu model, only a small number of states could succeed. Kerala and Rajasthan were among the few states which could successfully replicate the Tamil Nadu model in the past three years. Rajasthan has put in place a system of centralised procurement and decentralised distribution with the creation of the Rajasthan Medical Services Corporation (RMSC). Rajasthan has also institutionalised the Chief Ministers Free Medicines Scheme in 2011, to provide access to free medicines in the public health system.

An evaluation study of free medicine initiative in Rajasthan showed that the introduction of the scheme resulted in rapid increase in utilisation of public hospitals (Selvaraj S. et al. 2014²⁰). The study also demonstrates that availability of medicines in all the facilities have increased significantly due to the revamped procurement and distribution system.

As per the results, public facilities in Rajasthan were dispensing on an average 100 essential medicines, while in a CHC (Community Health Centre) and district health facilities, the number of essential medicines are 180 and 300 respectively in the year 2013. While the median percentage availability is about 61 per cent in a PHC (Primary Health Centre), and in a district hospital it is as high as 75 per cent. This is substantially higher than the number of medicines found at PHC or higher levels of public health facilities in other studies.

Figure 4: Monthly Trends in OPD-IPD visits in Public Facilities of Rajasthan



Source: Selvaraj S. et al. (2014)

Conclusion

Access to essential medicines is a crucial driver of quality of health care and it is interlinked with access to healthcare. General constraints in access to healthcare affect access to medicines (ATM) and vice-versa. Essential medicines play a major role in primary health care performance and medicines

²⁰Selvaraj S, Mukhopadhyay I, Kumar P, Aisola M, Datta P, Bhat P, Mehta A, Srivastava S, Pachauli C. Universal access to medicines: Evidence from Rajasthan, India. WHO South-East Asia J Public Health 2014; 3(3-4): 289–299.

availability is used as a measure of quality of care (Bigdeli et al. 2012²¹).

ATM works as a catalyst in strengthening other components of the health system, and in the process enhances overall system capacity. Results from the Chief Ministers Free Medicines Scheme in Rajasthan show a significant improvement in utilisation of public facilities. Since the introduction of the scheme in 2011 out-patient visits in public facilities in Rajasthan have increased several times (Selvaraj et al. 2014). Rajasthan could achieve this increase in utilisation with an additional annual investment of ₹300 crores, which is less than a tenth of total health budget of the state. On the other hand, in the context of fiscal conservatism and retreat of state from healthcare delivery, Tamil Nadu remains an exception in providing reasonable quality of care, anchored through its ATM initiatives. It has to be noted however, that success of Tamil Nadu cannot be seen only through ATM but as a part of a plethora of other initiatives rooted in a health systems strengthening.

Rather than treating it as a one-off project-based initiative, free medicines initiatives should be institutionalised. Improvement in drug availability must go in tandem with the availability of health workforce. Critical shortages of health workforce, particularly specialist doctors and pharmacists, needs to be addressed. The recent drive to appoint pharmacists permanently at various levels, including at the primary level in Rajasthan, shows that access to medicines puts pressures on governments to strengthen other elements of the system in order to provide good quality of care. The other important element is to make it mandatory for government doctors to prescribe generic medicines. This in itself can do away with a lot of malpractices, where doctors prescribe branded medicines rather than available generic substitutes and in this process push patients to purchase medicines from private pharmacies.

The experience of Rajasthan and other states suggest that there would be a lot of resistance from medical fraternity on compulsory generic prescriptions. The success of Free Medicine Initiatives would depend on how effectively governments respond to such challenges and enhance overall investment in filling critical gaps in service delivery.

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²¹Bigdeli M, Jacobs B, Tomson G, Laing R, Ghaffar A, Dujardin B, Van Damme W. Access to medicines from a health system perspective. *Health Policy and Planning*. 2012;1–13. doi:10.1093/heapol/czs108. <http://heapol.oxfordjournals.org/content/early/2012/11/21/heapol.czs108.full> - accessed 15 December 2014.