Managing resources and building capacity in the context of child health

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Since 1994, South Africa has made significant progress in realising children's rights to health. Key achievements include the provision of free health care for children under six, pregnant women and people with disabilities, an increase in access to primary health care, the eradication of polio and reduction of measles (although there has been a recent resurgence), and the roll-out of highly active antiretroviral treatment and prevention of mother-to-child transmission programmes. Child health outcomes have also benefited from improved access to child social security grants and the provision of water, sanitation and electricity.

Despite these achievements, South Africa has failed to reduce infant and under-five mortality rates, childhood malnutrition, or improve neonatal health. Teenage pregnancy and HIV prevalence rates remain high. Access to secondary and tertiary services and the availability of laboratory services and drugs remain patchy.

Despite high national expenditure on health, South Africa is failing to deliver quality health care to its children. Inequalities in health spending, inefficiencies in the health system and a lack of leadership and accountability contribute to South Africa's poor child health outcomes.

This essay explores what needs to be done to improve quality and coverage of maternal and child health services by examining the following questions:

- Are there sufficient resources to support child health in South Africa?
- What are the systemic problems or challenges facing the health system?
- What are the recommendations to improve child health and services?

Are there sufficient resources to support child health in South Africa?

There is no simple way to answer this question. The usual starting response would be to deliberate on the country's under-five mortality rate (U5MR). The 2010 UNICEF *State of the world's children* quotes a figure of 67 per 1,000 live births for 2008.[1] This high under-five mortality rate places South Africa 141st out of 193 countries.

A more appropriate comparison would be to consider the U5MR in relation to the country's available wealth and resources. South Africa's gross national income[i] (GNI) per capita in 2008 was $5,820 – the 93rd highest in the world.[2] This raises an alert. Why is the U5MR in South Africa lagging behind its economic capability? South Africa's high U5MR is even more disconcerting when compared to poorer countries such as Sri Lanka and Vietnam. These two countries' U5MRs are roughly five times lower (15 and 14 per 1,000 live births respectively) despite having a GNI less than one half to a third of South Africa's GNI.[3]

Is the problem that South Africa is not spending enough on the health of its citizens? Between 1998 and 2006, annual public per capita health expenditure remained virtually constant in real terms (ie accounting for inflation), and small increases in expenditure have not kept pace with population growth, or the greatly increased burden of disease.[4] Yet, the country spends 8% of the gross national product (GDP)[ii] on health,[5] and easily meets the World Health Organisation's informal recommendation that so-called developing countries spend at least 5% of their GDP on health[6]. However, public health expenditure, which accounts for 11% of the national budget,[7] was equivalent to only 3.5% of the GDP for 2008/09 [8].

Could it be that money is not being spent on children, or on only a few children? Or is it that the available money is being wasted or used inefficiently? Although the health of mothers and children has been a priority in government policy

i Gross national income is the income earned by a country, including labour and capital investment in a given year.
ii Gross domestic product is the market value of all final goods and services produced within a nation in a given year.

since 1994, including in the latest 10 Point Plan for Health,[9] it has not translated into movements in fiscal and resource allocation. Children comprise nearly 40% of the population,[10] but it is unlikely that a similar proportion of the health budget is spent on child health. (No reliable data exist, as government departmental budgets do not specifically delineate expenditure on children, easily allowing this constituency to be short-changed or ignored.)

What are the systemic problems facing the health system?

The World Health Organisation (WHO), in 2000, ranked South Africa's health care system as the 57th highest in cost, 73rd in responsiveness, 175th in overall performance, and 182nd by overall level of health (out of 191 member nations included in the study).[11] What explains this dismal rating?

Inequitable health care spending

Inequities and inequalities abound in South African health care spending generally, and specifically regarding children's health. Of the R192 billion spent on health care in 2008/09, 58% was spent in the private sector.[12] Although this sector only provides care to an estimated 15% of children, two-thirds of paediatricians service their needs.[13] Furthermore, of the R81 billion public health sector budget, about 14% is spent on central (tertiary) hospital services,[14] which primarily benefits children residing in urban settings and wealthier provinces such as the Western Cape and Gauteng. Similarly, marked inequities exist in the number of health professionals available to children in different provinces with, for example, one paediatrician servicing approximately 9,500 children in the Western Cape, but 200,000 children in Limpopo.[15] This differential exists among most categories of health workers.

Poor leadership

Many of the problems resulting in the poor delivery of health care to children are issues that affect their parents and other adults too. These include limited access to secondary and tertiary care,[iii] particularly in rural and remote areas, and poor quality of care at all levels (including limited drug and investigative ability). Much of the blame for this has been placed on lacklustre leadership within the health sector, lack of accountability within the public service, inefficiencies in health care service delivery, lack of skilled staff and poor management. These deficiencies have been acknowledged by the Health Department itself.[16]

Few would disagree that the department has failed to exercise its stewardship role adequately since the advent of democracy in the country. Most blameworthy was its inexplicable denialist approach to HIV/AIDS. Fortunately, the approach has changed. Nevertheless politicians, policy-makers and programme managers at national, provincial and district levels are equally responsible, with few individuals displaying true leadership qualities in the health arena.

Poor accountability

A lack of accountability at all these levels has been the main explanation for why inept performance has been tolerated. Accountability requires public officials to be answerable for specific actions, activities or decisions to the public (from whom they derive their authority). Accountability also means establishing criteria to measure the performance of public officials, as well as oversight mechanisms to ensure that standards are met. Focusing on accountability is therefore important for promoting capacity development and performance.

By 2010, a decade after the target deadline, only a single one of the 14 child health goals set by the Department of Health for 2000 had been met.[17] Despite this, no individual or department has been held accountable for the failure, making a mockery of the department's strategic planning and target-setting exercises. Much of this lack of accountability can be ascribed to the failure of the government to devolve health care responsibilities and budgets effectively to the district level, although this is the mainstay of the National Health Plan.

Thus, while responsibility for health care delivery primarily resides at a local (district) level, the control of resources and

iii There are three levels of care in South Africa's public health system. Primary health care is the health services closest to the community (eg clinics and community health centres). Secondary health care offers a greater range of services and some specialist care (eg district hospitals). Tertiary health care offers an even broader range of specialist services and facilities (eg teaching hospitals). Patients in need of specialist services should be referred to secondary or tertiary levels.

money remains at a central (provincial) level. Effectively, no one assumes responsibility. Much of the poor service delivery (at all levels) is ascribed to lack of skills and knowledge, but evidence to support this is difficult to collect.

Poor fiscal discipline

A lack of accountability extends throughout the health service, and includes a lack of fiscal discipline. Provincial departments frequently fail to budget adequately, resulting in the freezing of posts and the restriction of basic service provision (eg routine child immunisation services were seriously disrupted in the Free State province in 2009[18]). Every year, poor budgetary discipline results in critical shortages of drugs, food supplies and equipment in many provinces during the last financial quarter (January to March), and during April when new budgetary allocations are being released.

Non-clinical (central office) jobs are frequently preserved during freezes at the expense of health professional positions. Evidence of poor service delivery at hospitals is disputed, ignored, and mostly tolerated by readily accepting the excuse of low staff morale, staff or resource shortages and 'no money'. The consequences of this lack of accountability are predictable and inevitable for children – higher morbidity and death.

Limited child advocacy

Child health practitioners, including paediatricians, doctors and nurses, are not blameless. Few have assumed a strong advocacy role, demanding that children's rights to health as guaranteed by the Constitution are upheld. National bodies (such as the South African Medical Association or the South African Paediatric Association), university paediatric departments, and public and private practitioners have largely silently allowed the State to abrogate its responsibility. Efforts to influence change have mainly been through letters of concern and occasional meetings with authorities, but rarely followed up by sustained protest or other action. A notable exception was the efforts of Save Our Babies, an informal grouping of child health practitioners, who, together with the Treatment Action Campaign, successfully forced the State to change its prevention of mother-to-child transmission of HIV policy through a Constitutional Court challenge in 2002.[19]

Poor performance and delivery

Inefficiencies in health care delivery compound the crisis. Most primary health care services for children are only offered during office hours, with some clinics restricting access to services by new patients by early afternoon (a waste of available and expensive human resources). Transport to secondary level hospitals is problematic, resulting in delays or non-arrival, increasing the severity of the disease and treatment costs when the child does arrive. District hospital services are the most dysfunctional,[20] patients often by-passing this level of care in settings where access to specialist services are available. Despite cut-backs in budgets, tertiary care settings continue to attempt to provide 'first-class' services, which although commendable, may result in over-investigation and treatment, and denial of essential care to children who reside outside their immediate catchment areas (because the hospital is 'full').

In the absence of any provincial or district level monitoring of deaths or quality of care, the poor or negligent performance of some health institutions continues unchecked. A 'culture of mediocrity' dominates. Only the occasional patient or problem attracts media attention, usually because of a calamity, sufficient to raise any major concern from health authorities (who usually act to punish the 'guilty party' rather than to correct or address the underlying causes and problems inherent in the system).

Promotive and preventive care, while high on the policy agenda, feature weakly in care offered by individual practitioners and health centres. Poor child growth, HIV exposure, contact with individuals infected with tuberculosis and inadequate caregiver practices are all examples of 'red flags' that demand health care practitioner action but are often neither sought nor responded to. Again, while the policies may be clear, appropriate action by professionals is often lacking.

Inability to translate policy to practice

Key national child health programmes are either misdirected or poorly implemented. The Integrated Nutrition Programme, lauded as the solution to child hunger at its launch in 1994, has mainly focused on feeding school children, while thousands of children younger than two years continue to die of undernutrition (partly due to the failure to provide food and other support to children with overt 'failure to thrive' seen at clinics). Criticisms of the National School Nutrition Programme include the inappropriateness of the foods distributed, both in nutritional terms and in its potential to stimulate community job opportunities.[21]

The Integrated Management of Childhood Illness (IMCI) strategy is the preferred approach to providing primary health care to children under five years. While over 10,000 health practitioners were trained over the past decade, in some settings few return to practice IMCI at their own clinics after training,[22] mainly because of rigid organisational routines preventing trainees implementing their newly acquired skills, and lack of ongoing supervision and support[23]. The biggest deficit, however, has been the lack of leadership from national, provincial and district levels, and there has been no systematic

attempt to ensure that all IMCI trainees practise their newly acquired skills on their return to the health centre.

Distance and locally-based programmes of in-service training provide alternatives, such as the Perinatal Education Programme and Eduhealthcare, discussed in case 3.

What are the recommendations to improve child health and services?

It is always easy to find fault, but what about solutions? Many health professionals despair, not knowing how to influence or effect change in such a complicated system, and prefer to do nothing, hoping instead that some saviour (such as a new Minister of Health) will fix everything. Yet, true change depends on remedies at both the macro and micro level. Table x offers some solutions to the described problems.

A review of 30 low and middle income countries that have successfully reduced their under-five mortality rates identified the following as success promoting factors:

1. Good governance;
2. Progress in non-health sectors;
3. Nationally agreed packages of prioritised interventions that all stakeholders were committed to implementing;
4. Attention to district management systems;
5. Consistent investment in community health workers linked to the health system.[24]

Case 3: The Perinatal Education Programme and Eduhealthcare courses

David Woods (Perinatal Education Trust)

"I have forgotten most of what I have been taught but remember most of what I have learned."

One of the main challenges facing the rebuilding of child health services in South Africa is the development of in-service training opportunities for primary care nurses. Traditional methods of centralised, tutor-based teaching are expensive, limited by inadequate numbers of skilled trainers, require participants to move from their place of employment, and often are not appropriate to the real needs in clinics and district hospitals.

What is required is an innovative method to empower nurses and doctors to take partial responsibility for their own professional growth and continuing education. This would provide an effective means of building clinical competence, self confidence, motivation and job satisfaction among health workers. The state and private sectors need to supply only limited funding, facilitation and learning materials to extend the project to large numbers of participants.

A successful and well-documented model of self-directed distance learning for health professionals in Southern Africa are the Perinatal Education Programme and Eduhealthcare courses.[iv] This methodology is currently being used to restructure the Integrated Management of Childhood Illness course developed by the WHO/UNICEF.

Written by teams of paediatricians, obstetricians and nurses, the self-help courses address a wide range of maternal, neonatal and childhood problems. Using a blended approach of self study, peer learning groups and the support of local mentors, the learning material enables nurses and doctors to manage their own training courses. Regular meetings of participants use the principles of co-operative learning and peer tuition to encourage and consolidate self study. More experienced local colleagues can assist by demonstrating clinical skills while a few day visits by a regional facilitator can add to the structure and content of the course through the use of additional electronic learning material. Multiple choice questions enable participants to monitor their own progress through the course. The major responsibility for learning and evaluating progress through the course is placed on the participant rather than a formal tutor.

A number of prospective, controlled studies in South Africa have demonstrated the success of this educational approach with nurses: It significantly improved their knowledge, clinical skills, attitudes and standard of patient care.[26] The results were similar when medical students were targeted. To date, over 60,000 participants have benefited from these programmes.

Courses in various aspects of maternal care, newborn care, mother- and baby-friendly care, perinatal mortality audit, birth defects, perinatal and childhood HIV and child health care are available while other topics are being prepared. With this innovative, cheap method, all nurses and doctors responsible for providing maternal and child care can have ready access to training opportunities. This approach provides a simple, practical way of addressing many of the current training obstacles hindering the roll-out of continuing health care education, and promises a reduced under-five mortality rate and improved primary care for all children.

iv These were developed by not-for-profit organisations and are available in both paper and internet-based formats. See www.EBWhealthcare.com.

Table 11: Responses required to improve child health care in South Africa in the short and medium term

Problems	Required responses	Child health benefits (examples)
Leadership	Minister of Health and Ministry assume responsibility for addressing recognised deficiencies and creating an enabling environment for required changes.	Greater fiscal, human and other resources will be directed to children's health and well-being, leading to improved child survival.
	Provincial and district managers actively pursue child-friendly programmes and activities rather than favouring maintenance of the *status quo*.	This will lead to direct improvements in child health policy and programme delivery.
	Paediatricians, child health practitioners and activists develop and voice clear priorities and models for change.	These 'experts' can contribute to, and define, the child health agenda and its delivery.
Accountability	Clearly delineate and assume responsibilities for critical programmes by managers at national, provincial, district levels.	Good programmes, such as IMCI, will work.
	Establish norms and standards that support appropriate clinical care.	Individuals, health centres and the government held accountable if there are standards and norms to judge performance by.
	Introduce an accountable and operational management model.	Hospital and clinic managers will be held accountable for failure to deliver appropriate services.
	Relate performance to reward.	Linking performance evaluation of staff to health indicators in their institution or region may remove current inappropriate performance bonus allocations.
Limited capacity	Provide additional resourcing in numbers, motivation and expertise to strengthen a results-based health system.	More staff (particular nurses) may translate to less queuing and improved quality of care.
	Ensure nationwide availability of community health workers (one per 150 households) focusing on maternal and child health, with appropriate training, training materials, motivation and remuneration.	Preventive and promotive maternal and child health activities can actually happen, such as support for breastfeeding, infant nutrition and recognition, and early intervention in child illness.
	Shift tasks (allowing trained individuals to assume greater responsibilities) with training, support and appropriate adjustment of current 'first world' type legislation.	Use of available human capital is maximised, eg doctors are freed from performing tasks that could be done by other health professionals.
	Promote facility-based in-service training using local mentors and distance learning materials (when appropriate).	Improved training and delivery of child health services.
Poor information systems	Set up responsive national and provincial health structures to collect health data reliably and uniformly.	Data will enable the setting of appropriate national priorities, monitoring progress and easy identification of districts in need of support or intervention.

Problems	Required responses	Child health benefits (examples)
Inequity	Ensure a formal and deliberate focus on identifying and eliminating child inequities – including the allocation of, and access to, resources.	Greater human resources (eg paediatricians) are allocated to poorer settings; increased access to secondary and tertiary care services.
	Delineate and ring-fence budgets allocated to children by government departments.	Children would acquire an equitable share of government expenditure at programme level.
Inefficiencies and poor service quality	Promote quality, including measuring and benchmarking actual performance, quality assurance and audit.	Child mortality is reduced and better outcomes ensured at hospitals and clinics.
Resource allocation and fiscal discipline	Base health budgets on outcomes and not on existing costs.	Centres that use money wisely (cost-effectively) are rewarded rather than those that 'save' by cutting services.
	Provide service level agreements to define services, supported by appropriate budgets based on load indicators (such as case mix and patient day equivalents).	Resources are used effectively as intended rather than the current trend of overspending, followed by cutting of essential services.
	Curb overspending.	Budgets that are linked to the setting of norms and standards and performance outcomes are less likely to waste.
	Use appropriate new low-cost technologies.	Treatment compliance is promoted by, for example, using cell phone short message services (SMS).
Lack of ownership	Emphasise the development of community and family health practices.	Families are empowered to care for children, and to recognise and respond to illness appropriately.

While table 11 offers some suggestions about what should be done, it does not address many other critical issues such as how these responses should be prioritised, in what sequence, by whom and with what resources.

A reasonable first step would be to ensure greater resource allocation for children's health in a measurable and controllable manner. A recent exercise conducted in Gauteng estimated that an additional (marginal) investment of R4 billion over five years (or R70 per capita) in child health could save the lives of 14,283 children and reduce the U5MR by 50%, almost meeting the provincial Millennium Development Goal target for 2015. This additional investment would require less than 5% of the current provincial health budget.[25] Not all of this needs to be 'new' money – much, but not all, of the money could be obtained through reducing present inefficiencies.

Conclusions

Although there is a need for more efficient redistribution of national wealth to support child health, the poor health status of South Africa's children is less the consequence of resource constraints, and more the result of inefficient management and use of available resources, primarily due to poor leadership, poor organisation and the absence of accountability. The solutions are daunting, complex, involve multiple layers and components of the health service and individual practitioners, and require new and reallocated resources.

The challenge is to harness the country's resources, experience and talent in a manner that can effectively promote change. Ordinary people have an essential role to play and must become active citizens, not just in their demands for accountable

governance, but in their own contributions to ensuring that 'health for all children' becomes a reality. Many Thai, Vietnamese and Sri Lankans will confirm that this is possible.

References

1 UNICEF (2009) *State of the world's children 2010. Special report. Celebrating 20 years on the Convention on the Rights of the Child*. New York: UNICEF.
2 World Bank (2010) *Gross national income 2008, Atlas method*. World Development Indicators database, 19 April, 2010. Accessed on 12 May 2010: http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNI.pdf
3 See no. 1 and no. 2 above.
4 Cullinan K (2009) Zim crisis 'A threat to SA AIDS success'. *Saturday Argus*, 4 April 2009, p. 13.
5 Personal communication. McIntyre D, Health Economics Unit, University of Cape Town, March 2010.
6 World Health Organisation (2003) *How much should countries spend on health?* Discussion paper no. 2, 2003. EIP/FER/DP.3.2. Geneva: WHO.
7 National Treasury (2009) *Medium term budget policy statement 2009*. Pretoria: National Treasury.
8 See no. 5 above.
9 Department of Health (2010) *Strategic plan 2009/10 – 2011/12*. Pretoria: DoH.
10 Statistics South Africa (2009) General Household Survey 2008. *In:* Hall K (2010) *Demography – Children in South Africa*. Children Count – Abantwana Babalulekile website, Children's Institute, UCT. Accessed on 30 April 2010: www.childrencount.ci.org.za/indicator.php?id=1&indicator=1.
11 World Health Organisation (2000) *The world health report 2000*. WHO: Geneva.
12 See no. 5 above.
13 Colleges of Medicine of South Africa (2009) *Project: Strengthening academic medicine and specialist training*. [Unpublished data]
14 Financial and Fiscal Commission (2009) *Submission for the division of revenue 2010/11*. Accessed on 28 May 2010: www.ffc.co.za/docs/submissions/dor/2010/FFC%20Report%202009(Web).pdf
15 See no. 13 above.
16 Department of Health (2009) *Annual National Health Plan (ANHP) 2009/10*. Pretoria: DoH.
17 Department of Health (1997) *Year 2000 health goals, objectives, and indicators for South Africa*. Pretoria: DoH.
18 Kok D (2009) Entstofkrisis in Vrystaat. *Volksblad*, 5 August 2009, p. 1.
19 Heywood M (2003) Current developments: Preventing mother-to-child HIV transmission in South Africa: Background, strategies and outcomes of the Treatment Action Campaign case against the Minister of Health. *South African Journal on Human Rights*, 19: 278-315.
20 Cullinan K (2006) *Health services in South Africa: A basic introduction*. Cape Town: Health-e News Service.
21 Sanders D & Chopra M (2006) Key challenges to achieving health in an inequitable society: The case of South Africa. *American Journal of Public Health*, 96(1): 73-79.
22 Thandrayen K (2008) *The quality of child health services offered at primary health care clinics in Johannesburg*. MMed research report, University of the Witwatersrand. [Unpublished]
23 Mazibuko N (2007) *A descriptive study on constraints faced by Gauteng IMCI trained health workers*. MSc research report, University of the Witwatersrand. [Unpublished]
24 Rohde J, Cousens S, Chopra M, Tangcharoensathien V, Black R, Bhutta ZA & Lawn JE (2008) 30 years after Alma-Ata: Has primary health care worked in countries? *The Lancet*, 372(9642): 950-961.
25 Gauteng Department of Health (2009) *Marginal budgeting for bottlenecks*. [Unpublished report]
26 Woods DL & Greenfield DH (2010) Teaching in under-resourced hospitals: Experience from South Africa. *NeoReviews*, 11: 5-11;
Woods DL & Theron GB (2000) A distance learning programme in maternal and newborn care. *Perinatology*, 2(6): 283-285.