Keeping children alive and healthy in South Africa – how do we reach this goal? Perspectives from a paediatrician in a District Clinical Specialist Team

U D Feucht, MB ChB, FC (Paed) SA, MMed (Paed), Dip HIV Man (SA), CAHM

Tshwane District Clinical Specialist Team, Gauteng Department of Health, South Africa; Department of Paediatrics, Kalafong Hospital and University of Pretoria, South Africa

Corresponding author: *U Feucht (ute.feucht@up.ac.za)*

District Clinical Specialist Teams (DCSTs) are part of the primary healthcare re-engineering process in South Africa. These multi-disciplinary clinical teams were established throughout the country in 2012, and their main role is reduction of maternal and childhood mortality and morbidity through improvement of service delivery at primary care level in their health districts. The Tshwane DCST is used as a case study to describe the challenges encountered in establishing the team within the complex district health system. On the other hand, the cross-disciplinary approach has proved itself a winning combination if the team shares a common vision and has a work plan to guide the priorities and facility support visits. Through their clinical expertise, and using extensive networking, DCSTs are well positioned in the health system to have a strong positive effect on child health.

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South Africa has undergone immense changes over the past two decades. The birth of democracy, which brought with it the promise of improved access to healthcare and health outcomes for all, overlapped in time with the massive HIV pandemic that engulfed the country. Millennium Development Goals 4 and 5 – reduction of childhood and maternal mortality – became impossible targets to reach, as maternal and child health deteriorated during a period when most other countries could report success.[1,2] While the country now has increased life expectancy as a whole, it still needs to make considerable improvements in the care of pregnant women and children.[2]

For South African children, it was not only HIV infection itself that caused the high morbidity and mortality. HIV exposure without HIV infection also posed significant hazards: lack of breastfeeding, risk of other infections, stigmatisation and orphanhood, among others. The overlap of the adult HIV and tuberculosis (TB) epidemics put children at much greater risk of acquiring TB, while the risk of malnutrition was amplified by the interplay of the two epidemics in the sociopolitical environment of change.[2] In turn, the high prevalence of chronic illnesses became a major contributor towards high mortality from acute childhood illnesses.

Against this backdrop of high disease burden, the South African health system needed to ensure equitable access as well as quality healthcare to all its citizens, with provision of appropriate level of care according to need. However, the health system has an unequal distribution of resources, with a strong divide between the private and public sectors, the latter providing care to the majority of citizens.[1] Within the public sector there have further been strong geographical divisions between health services in urban and rural areas, and between different provinces, in terms of access to care, resources and staffing. Moreover, the approach historically was hospi-centric and curative, with a strong emphasis on acute care. The vast majority of specialists are hospital based, often resulting in isolation from the primary healthcare structures.

The district-based healthcare system includes primary healthcare (PHC) clinics and community health centres (CHCs), as well as district hospitals. Vertical health programmes furthermore play an important role in the provision of child health services – apart from the HIV and TB programmes, there is the Expanded Programme on Immunization, Integrated Management of Childhood Illnesses and the nutrition programme, among others.

While childhood morbidity and mortality are closely linked to socio-economic status and chronic diseases in the community, neonatal outcomes are additionally affected by obstetric care, necessitating a different approach in the quest for improved outcomes.[2,3]

The mismatch between disease burden and care provision required a rethink of the health system. A shift from a curative to a preventive approach ensued through the process of PHC re-engineering, which included the establishment of District Clinical Specialist Teams (DCSTs), the Integrated School Health Programme and Ward-based Community Outreach Teams.[4,5]

DCSTs

The main focus of DCSTs is reduction of maternal and childhood mortality and morbidity through the improvement of service delivery at PHC level in their health districts. These clinical teams were established throughout the country in 2012 and are multi-disciplinary in nature – they comprise a family physician, obstetrician, paediatrician and anaesthetist, as well as a PHC nurse, advanced midwife and paediatric nurse.[4] Primarily these need to function as a team, and thereafter as individuals in their respective disciplines. They report directly to the District Manager, and also have a second provincial reporting line to the Provincial Specialist or the Provincial DCST Co-ordinator.[5]

DCSTs are bridge-builders, forming a vital link within a fragmented health system and thereby promoting equal access to and a continuum of care. They collaborate with Department of Health (DOH) directorates, municipal health services and other relevant national and international agencies to promote clinical effectiveness through training and mentoring, as well as development and implementation of clinical protocols and standard treatment

guidelines aligned with national norms and standards. They need to act as clinical role models and provide supportive supervision to bridge the gap between knowledge and practical implementation at facility level. The focus is on integration and co-ordination of staff, services and health programmes, the actual implementation of healthcare activities remaining the responsibility of the relevant management and staff at each health facility or programme.

Risk management activities, which complement the existing institutional programmes and annual reporting cycles, include critical event analysis, morbidity and mortality meetings and quality improvement cycles. The DCSTs support the local departmental data collection and management and also obtain data through their own auditing, collaboration with clinicians and participation in relevant research. In this way they assist the district management to target health service provision in each individual health district according to local circumstances.

The Tshwane DCST

The Tshwane DCST is almost complete, with only the paediatric nurse still to be appointed. The district is large, with 2.9 million inhabitants, and has urban and rural areas.[6] Furthermore, it is a National Health Insurance (NHI) pilot district, so the DCST needs to work closely with the NHI implementation team. There are two universities, each with a medical campus, as well as four large (central/tertiary/regional) hospitals. Within the district health structure there are four district hospitals as well as 10 CHCs and 68 PHC clinics, of which 26 are municipal clinics with a completely separate reporting structure.

Soon after the team was formed, it met its first challenges. As the 'new kid on the block', it first had to find its feet and learn to work within the district health structures, and the other role-players also needed to understand the role of the DCST. It needed to establish itself as a clinical team with a focus on providing support and not on policing staff or systems, and to be able to manage perceived or real interference constructively. The very wide job description meant that it was impossible to address all the issues at once, and priority setting had to be done through the development of a work plan that defined the main activities towards improving maternal and child health, as well as structuring visits to the many healthcare facilities in the district. The work plan also helps the team avoid being pulled into district programmes and priorities that are, at most, remotely related to maternal and childhood mortality.

Another of the vital first steps was to gain a better understanding of the environment, which included district health service provision and the epidemiological profile of the population. The District Health Information System proved to be only partially helpful in this regard owing to challenges with data collection and management.

As a team of different specialties and a combination of nurses, medical officers and specialists, the DCST has proved to be a winning combination if its members share a common vision. The strength of the cross-disciplinary approach can readily be appreciated for common themes like reduction of neonatal mortality – working together as a team towards improving standards in antenatal, intrapartum and neonatal care and training in emergency management. In practice, many other points of contact between maternal and child health exist, for instance in HIV/TB care and family planning/child spacing.

DCSTs need to have a mindset that sees their responsibility as being to the population at risk in the district and not only to specific facilities or specialties. The personal re-orientation from a hospi-centric, curative approach to a preventive, public health approach has in many ways been a 'learning by doing' exercise, and for the future it will be vital for the country to invest in the training of a cadre of healthcare workers, both at under- and postgraduate levels, who will be able work effectively in DCSTs in every health district. In Tshwane, the DCST is in the fortunate position to be able to leverage support from hospital-based specialists and local tertiary institutions, as for many team members this is well-known territory. Tools and guidelines that are developed through this process can be shared with other districts, where specialists are even scarcer.

The wide job definition means that very few borders are set for DCSTs. Because they work from the community level to primary, secondary and tertiary care, with various stakeholders in the district health structure and also with DOH directorates, municipal health services, support services, non-profit organisations and social services, extensive networking is necessary. There are some challenging limitations. When hospital catchment areas and referral routes cross district and especially provincial borders, for example, it becomes much more difficult to assist in terms of system strengthening, as the district boundaries effectively contain the DCST's work environment. Partnerships therefore need to be put in place through cross-border forums and co-operation with neighbouring DCSTs.

Another challenging area has been how to optimally support lone specialists at smaller hospitals, in order to help break their isolation and link them up to the larger health system. The DCST additionally contributes towards improved supervision of junior doctors at district hospitals, by providing support in terms of medical care, equipment needs and medications. Improving nutritional assessment and accessing a continuum of care from PHC level up to tertiary care for paediatric HIV and TB has been another focus area. Referral of sick children to higher levels of care is a system bottleneck that needs urgent attention, including problems with emergency transport and insufficient paediatric and neonatal intensive care beds, which result in unnecessary morbidity and mortality at district level.

The slow pace of change in this complex health system has at times been very frustrating. Even after facility support visits by the DCST, reports being written and guidelines being put in place, the Tshwane DCST has often revisited the same reports and noted only minimal movement in certain important areas. In some instances the mainly supportive function of the DCST has been problematic on the journey towards improved health outcomes, as supportive supervision does need the system to respond in order to be fully effective.

Working with staff from the vertical health programmes furthermore highlights the difficulty of integrating these with all the other services that are offered at facility level. Measuring indicators on performance of individual health programmes does not guarantee excellent and client-centred services, and facility managers need to be empowered and incentivised towards the provision of integrated, high-quality services and promoting local teamwork and caring attitudes towards clients. Actively working with managers from the hospitals and other health facilities towards improving clinical care, including benchmarking of services at different facilities and sharing of best practices, has become one priority area for the Tshwane DCST.

Towards the goal of improved child health in South Africa

DCSTs have now become part of the medical landscape in South Africa, being functional in the majority of health districts, although teams may be working at various levels of expertise and many vacant posts still need to be filled. Each health district has unique features, and the DCSTs are ideally placed to inform the district management teams on local priorities and goals.

With their level of clinical expertise and their placement within the district health system, DCSTs are positioned to have a strong positive impact on maternal and childhood morbidity and mortality through improved primary healthcare. But clearly they cannot do this in isolation, and strong leadership and accountability are required at all levels of management. Excellence in work done

by healthcare workers needs to be rewarded, and they need to be empowered to take responsibility, pride and acknowledgement. Another important factor is that PHC strengthening should not take place at the cost of the existing hospital services, as many gains will potentially be lost if patient referral systems do not provide for higher levels of care if required.

Measuring the impact of the role of DCST paediatricians on child health will require a long-term approach, because of the complex system they function in. Within the health system, data management systems need to be improved, databases put in place and connectivity of health services upgraded, so that child health parameters and their changes over time can be monitored better.

By their nature DCSTs have a strong focus on the continuum of care – from maternal to neonatal to childhood and adolescent care – and this clearly creates a unique working environment for the DCST paediatrician to contribute, bit by bit, towards improved child survival. This wide scope underlines the vital need for effective communication and collaboration within the DCST in order to retain focus and keep the team itself together. This then paves the way towards improving linkages with many different sectors of the health system – it means working with people and systems, and not against them. It is crucial to motivate front-line healthcare workers to do their best every day, despite the obvious challenges in their daily work environment. With the focus in clinical care shifting back to 'care', South Africa will move closer towards the hope of improved child health.

References

1. 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;374(9692):817-834. [http://dx.doi.org/10.1016/S0140-6736(09)60951-X]
2. Chopra M, Daviau E, Pattinson R, Fonn S, Lawn JE. Saving the lives of South Africa's mothers, babies, and children: Can the health system deliver? Lancet 2009;374(9692):835-846. [http://dx.doi.org/10.1016/S0140- 6736(09)61123-5]
3. Pattinson B, Rhoda N, Pillay Y, et al., for the National Department of Health, South Africa. Guidelines for District Clinical Specialist Teams for improving maternal and neonatal health services in South Africa. January 2013. http://www.rmchsa.org/wp-content/resources/resources_by_type/DistrictLevelResources/Guidelines_DCST_ImprovingMNCH_Feb2013.PDF (accessed 11 November 2013).
4. Department of Health, South Africa. District clinical teams in South Africa – Ministerial Task Team Report. http://www.doh.gov.za/docs/reports/2012/District_Clinical_Specialist_Teams_in_South_Africa_Report.pdf (accessed 11 November 2013).
5. Department of Health, South Africa. Speech of the Minister of Health at the launch of the induction programme of the clinical specialist teams. 27 September 2012. http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=31283&tid=86339 (accessed 11 November 2013).
6. Statistics South Africa. Statistics by Place/Metropolitan Municipality. City of Tshwane. http://beta2.statssa.gov.za/?page_id=1021&id=city-of-tshwane-municipality (accessed 11 November 2013).