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**ROYAL COLLEGE OF PAEDIATRICS AND CHILD HEALTH**


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**INTERNATIONAL CHILD HEALTH GROUP**


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## Shifting Profiles of Global Adolescent Health

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Economic development has brought rapid shifts in patterns of disease across the globe that has come to be known as the epidemiological transition.<sup>1</sup> It is only in sub-Saharan Africa and some parts of Asia that the health problems of infants and younger children remain the over-riding priority. Elsewhere there are now reasons to look beyond infant and maternal mortality as the dominant global health priorities in the young.

Adolescent health is one emerging priority area that has growing relevance beyond the high-income world. Compared to younger children, the effects of the epidemiological transition on adolescent and young adult health have been less well understood. This is in some ways surprising. Economic development and its accompanying social, cultural and technological changes might be expected to have greater effects on the health and lifestyle of this age group than any other.<sup>2</sup>

A recent publication in the Lancet on '*Global Patterns of Mortality in Young People*' has for the first time documented patterns of death in adolescents and young adults in low and middle income countries.<sup>3</sup> The variation in youth mortality across the globe provides some indication of how economic development may affect the health of young people.

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[Child2015-admin@dgroups.org](mailto:Child2015-admin@dgroups.org)

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Mortality rates were compared across high-income countries and low and middle-income countries grouped by the World Health Organisation regions.

Three different patterns emerged:

1. **Low youth mortality regions:** The Western Pacific region, dominated by China, had mortality rates comparable to the high-income world. Deaths from road traffic injuries (RTI) and suicide dominated the picture in both high-income countries and the Western Pacific. Female mortality rates were low across each age group. In males there was a rise in death rates between early adolescence and young adulthood but this was much less prominent than in low and middle income countries elsewhere.
2. **Intermediate mortality regions:** These regions included the former Soviet block countries and much of Central and South America. Injury deaths in males dominated youth mortality with homicides adding substantially to the burden of deaths from suicide and RTI. Mortality rates in females were low.
3. **High mortality regions:** These countries included much of sub-Saharan Africa and the middle to low income countries of Asia. Death rates tended to be high in younger adolescents and females had a mortality rate comparable to males. In sub-Saharan Africa female deaths were even higher than in males. The leading cause of death remained infectious diseases (TB and HIV). Although the proportion of deaths attributable to violence, suicide and RTI were less than in the low mortality regions, the absolute rates tended to be higher. Southeast Asia and the Middle East stood out for their very high rates of injury deaths in young females.

The global data also point to relative shifts in mortality and disease burden with economic development from earlier childhood to adolescence. Figure 1 compares the mortality curve between the ages of 1 and 24 years in sub-Saharan Africa and the high-income world. The African curve is a reverse J with by far the highest mortality in early childhood.

In contrast, although overall mortality in all age groups is greatly reduced, the curve in the high-income world is J shaped for males and U shaped for females, with relatively higher mortality in later adolescence and young adulthood. This pattern of higher youth mortality compared to younger children is already evident in the intermediate mortality regions, where countries have begun to pass through the epidemiological transition.

### **IMPLICATIONS FOR HEALTH POLICY**

The global mortality data point to changing needs that in turn have relevance for health policies. As a field, adolescent health has been relatively neglected in global health initiatives. The historical emphasis in adolescent health policy has been sexual and reproductive health. This emphasis on sexual and reproductive health makes good sense in those parts of the world with high mortality but has arguably led to a neglect of the health problems that are common in young men and with economic development. Furthermore, other problems that make a major contribution to disease burden and which commonly have an onset in youth, including mental disorders and substance use, have had less attention than they deserve.<sup>4</sup> In high-income countries, adolescent health agendas have been driven by the community concerns of the day. This has resulted in a rotating focus on issues such as substance use, STDs, violence and mental health.

## **Editors Note**

- The ICHG newsletter has a new editorial team who want to express their thanks and appreciation of the work Dr Sheila Reilly has previously done in this role.
- In this summer newsletter we present an “adolescent health” themed issue. We have a variety of articles from an overview of the issue by Professor George Patton to a personal contribution from Uganda.
- For future issues we are moving to an online version of the newsletter. We hope this will be more convenient for everyone and will cut down the carbon footprint of our organisation. In light of this we ask that you check Kelly Robinson has your up to date email address ([kelly.robinson@rcpch.ac.uk](mailto:kelly.robinson@rcpch.ac.uk)). Those of you who are keen to get a paper copy should please contact Kelly.
- The newsletter will continue to be posted on the ICHG website at the end of the year [www.ichg.org.uk](http://www.ichg.org.uk)

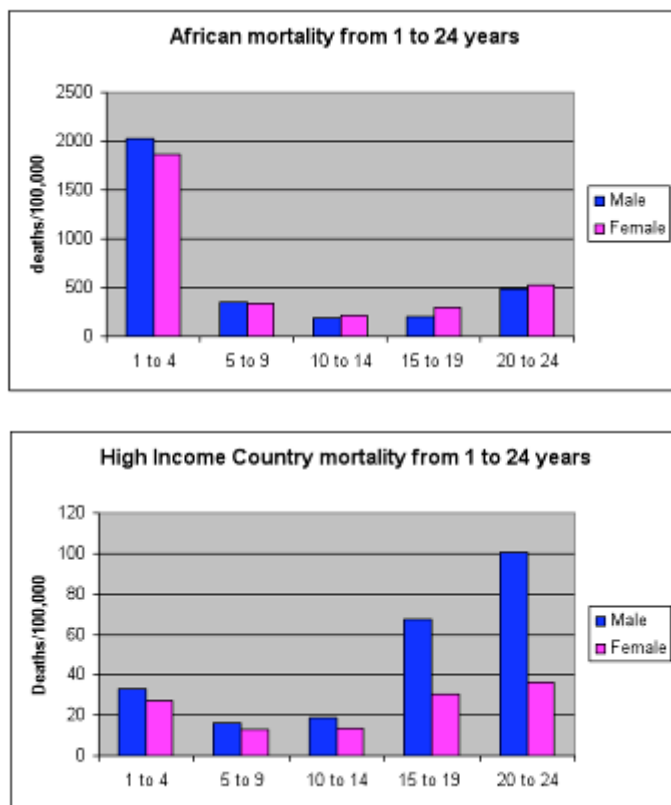
Many thanks Dr Delan Devakumar & Dr Helen Brotherton

Policies and practices have generally been formulated with a narrow agenda around a specific disease group with little attention either to common social determinants of health problems or to the provision of health services to adolescents.<sup>5</sup> This ‘revolving door’ of health policy has become a major barrier to the development of a broader adolescent health agenda.

Injuries emerged as having particular relevance for youth. In older adolescents and young adults, injuries accounted for over 40% of all deaths compared to 12% in other age groups. Injuries have only recently come to attention in global health policy. Forward projections to 2030 indicate that RTI, suicide and violent death are likely to increase with young adults most likely to be affected.<sup>6</sup>

Some of the most important preventive interventions are likely to lie in the social context and environments in which young people live, work and grow. Early research findings from interventions in community and school setting suggests that such approaches may do much to prevent a range of the health problems initiated during the adolescent years.<sup>7</sup>

Figure 1. Annual mortality incidence in 1 to 24 year olds grouped by age bands for males and females in sub-Saharan Africa and high income countries respectively



## VISIBILITY OF ADOLESCENT HEALTH

Paradoxically, the publication of the first report on global youth mortality has highlighted the dearth of good health information on most of the world’s adolescents. Death is an insufficient health indicator in an age group where many of the most important diseases are not fatal.<sup>8</sup> It is also clear that those regions with the highest mortality have the most limited data. There are, nevertheless, some grounds for optimism about being able to put together a better global picture of adolescent health. Many countries are investing in surveys to document patterns of adolescent health and development. The Global School Health (GSHS) and Health and Well-being of School Aged Children (HBSC)<sup>9</sup> surveys are examples that offer an understanding of morbidities and risks from substance use, accidents and mental health. More work of this kind is needed in low and middle-income countries where health research capacity is limited.

There is still much to do in demonstrating the effectiveness of health interventions in adolescence. We know, for example, that a majority of adolescents in high income countries attend primary care services in the course of a year, suggesting much scope for preventive health care.<sup>10</sup> However, it is likely that that many of the highest risk adolescents, such as those in protective care and juvenile justice, do not access primary care frequently enough for this to be feasible strategy of health care, raising questions about access for these high risk groups.<sup>11</sup>

Universal prevention strategies in adolescence have attracted interest as a way to address broad social influences on adolescent health risks and lifestyles. Some have been formulated into programmes such as ‘Health Promoting Schools’ and ‘Communities that Care’ where the aims are to promote individual skills in the social environments that underpin resilience.<sup>12</sup> The strategies may include provision of health related knowledge and life skills, as well as promoting a sense of belonging and engagement to school and neighbourhood settings. The evidence for these approaches is growing in high-income settings but still remains scant in low and middle-income countries.<sup>13</sup>

The reasons for taking adolescent health seriously are clearer than ever.<sup>10</sup> Increasingly we recognise adolescence as a common point of change in health status, one where future trajectories in adult health become evident. Effective health interventions would therefore do much to preserve the investments now being made in health and development in the very early years.

Shifting future profiles of adolescent health is likely to require diverse strategies ranging from the clinical to community-based. The gains will not only be in future population health but also in economic productivity and a better start to life for the next generation.

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## Tumusiime's Story

I am an adult physician currently working in a hospital in Uganda where children become adults at the age of thirteen. Over the last six months I have looked after many sick adolescents, which at times has been professionally challenging. In this article I try to let a young man I looked after tell his own story. Hopefully it will come across as confidently and matter-of-fact as when he told me in person.

Tumusiime was admitted to the male adult medical ward with severe left upper lobe pneumonia. He had a cough for two years but became more unwell one month prior to admission. Whilst he was sitting his geography exam he began to shiver and thought it may be malaria. He wanted to finish the exams so he stayed at school for a week but eventually his friends spoke to the school staff who sent him home.

Once at home he told his brother he had malaria who bought some quinine which was given at home. It was only when he started to cough up blood three weeks later that he came to the hospital. He thought he would be treated as an outpatient, as he had been in the past, however this time he was admitted to hospital. It was very frightening as it was the first time he had received intravenous fluids and medicine.

During the stay his "heart started to fear" when he saw three of the other men on the ward die. One of the men had been on oxygen and that made Tumusiime fear this treatment. When asked if he would rather have been on a paediatric ward Tumusiime replied that he found all the doctors and nurses very "friendly and good" and that he liked the daily greetings and frank discussion with the doctors on the ward rounds. He was much happier being with adults than surrounded by the "noise" of paediatrics and the stench of children "urinating on themselves".

Tumusiime's mother died when he was young and he now lives with his brother and seven others. Recently a man visited to counsel the community on the importance of being tested for HIV. Many of the other children were scared but Tumusiime agreed to be tested and he was positive. At first he was afraid to take any medicine as he had seen so many people from that clinic "dying dying". He went along to the clinic, got a mosquito net, started his Septrin and since then has been in charge of his own condition. Although he goes by himself to the appointments his family are very supportive. He doesn't know if any of his family have been tested for HIV or if they are positive.

**We're on the web:  
www.ichg.org.uk**

**Date for diary:  
4<sup>th</sup> November 2010  
ICHG Winter meeting**

At the clinic Tumusiime made friends with other children and is captain of their football team. He also has a counsellor whom he sees both at the clinic and during home visits. He knows about HIV from classes at both primary school and the clinic.

Tumusiime is planning to take his O-levels soon after repeating a year due to ill health and he hopes to become a road construction engineer. He has one friend at school who is also HIV positive and says it can be hard being sick at school because there is no medicine other than paracetamol.



Football "on top of the world", Uganda *D Devakumar*

He was discharged from hospital after eight days and has been recuperating at home. He still has a cough but is feeling much better, although it means that he can only play half a game of football instead of the full match. He has missed some of his mid-term exams but hopes to catch up with the help of his friends and the library. At his next clinic appointment he is due to start anti-retroviral therapy but there is currently a limited supply in the local clinics. Tumusiime's main hope however is that he recovers enough to captain his football team to victory.

Tumusiime's experience highlights some of the challenges faced by adolescents with HIV in Uganda, from the lack of appropriate hospital facilities to the difficulties in balancing health needs with school and family life. His "totem" is a buffalo, which he feels, describes him well; although he does not like to fight he is not afraid to do so and he will.

Dr Kate Woods, SpR/Adult physician in infectious diseases and microbiology

*NB: Tumusiime is a pseudonym and the article has been written with his full consent.*

[Participation and young people's health - a growing global issue](#)

Harrison Carter, Member of Youth Parliament for Sheffield (aged 17)

Dougal Hargreaves, MD Student, Institute of Child Health

The period of transition from childhood to adulthood is often regarded as a healthy one, characterised physically by increasing strength and fitness and socially by increasing independence and a greater voice in society.

Adolescence is recognised as a unique developmental stage, which places specific demands on health services. A common theme across studies of health services for young people is an emphasis on participation of young people.

The World Health organization advises that youth "should be involved from the start as full and active partners in all stages from conceptualization, design, implementation, feedback and follow up."

UNICEF, drawing on articles 12 and 13 of the UN convention on the Rights of the Child (1989), emphasise that participation of children and young people is a human right and thus an end in itself.

-Although participation is universally recognized as an important component of good quality services, there has been wide variation in how this is interpreted. In some cases, professionals are much more willing for young people to be involved in work around awareness and publicity for the service, than they are to share power in governance structures and assessing quality.

**Case Study 1: The Philippines**

In 2003 the Family Planning Organisation of the Philippines (FPOP) hosted a 3 day National Meeting of youth leaders in Manila that brought together 26 youth leaders from 26 key cities in the Philippines to discuss young people's views on a range of issues including sexuality, gender, rights and HIV/AIDS.

The 20 % Youth Participation Movement successfully campaigned for a rule that at least 20% of the governing board should be young people. A youth committee was established to discuss programmes and is headed by young people themselves with guidance from adult counterparts.

Sustainable, ongoing contribution to national policies were put forward - in particular:

- Developing youth friendly standards
- Promoting choice of contraception, including emergency contraception
- Advocacy for sex education

**Case Study 2: UK**

As part of a campaign for more accessible mental health services for young people in Sheffield, a survey was conducted to investigate young people’s opinion of what mental health was, the quality of the services provided if they had used them, and who they would feel most comfortable talking to about their problems.

There is a strong tradition of youth participation in hospital governance in Sheffield. For example the Children’s Hospital has representation on their governors body from two people based in the 0-19 Partnership. The hospital sees youth participation as a key element of improving the quality of their services for young people.

Despite examples such as Sheffield Children’s Hospital, which show the benefits of young people’s participation, youth organisations such as the Youth Parliament have found that awareness of the benefits is often low and many NHS services in the area are slow to support meaningful participation of young people.

Similarly, although many young people locally have enjoyed the participation process and feel they have gained valuable experience and confidence, others are much more reluctant to take part. There is a need to encourage more young people to get involved and raise awareness of the difference they can make – whether simply by speaking up about their own experience or standing formally as a member of the hospital board.

**Conclusion**

There is now widespread recognition, both in the UK and internationally, of the importance of young people’s participation in developing high-quality, effective health services. The current challenges are:

1. To move from isolated areas of good practice to routine participation of young people across all services
2. From a research perspective, to improve the evidence-base for the importance of young people’s participation and learn from the experience of those who have put it into practice.

For further information see

‘Not just a phase: A Guide to the Participation of Children and Young People in Health Services’. Royal College of Paediatrics and Child Health, 2010. ([http://www.rcpch.ac.uk/doc.aspx?id\\_Resource=6567](http://www.rcpch.ac.uk/doc.aspx?id_Resource=6567))

UNICEF Child and Youth Participation Resource Guide. (<http://www.unicef.org/adolescence/cypguide/resourceguide.html>)

**David Morley Medical Student Bursary**

We are pleased to announce the winner of the 2010 David Morley Award:

***Malnutrition and feeding amongst children with neuro disability in Gwalior Children’s Charity, India***

Laura Mulcahy, University of Leeds Medical School

This medical student elective project aims to assess the nutrition and feeding practices of children aged 5 – 19 years with a range of learning difficulties and neurological impairments who are resident at Gwalior Children’s’ charity in Madhya Pradesh, India.

A full report will be published in the ICHG newsletter upon completion of the project

**ICHG Winter Meeting 2010**

**Children and Women in Conflict**

Institute of Child Health, London

**November 4<sup>th</sup> 2010**

## Convenors Report

### ICHG / VSO Spring Meeting

The University of Warwick, April 2010

Our first Warwick meeting was an opportunity to embed our joint session with VSO and the College's International activity and bring these related strands together. Whilst it achieved this aim I think we should be more ambitious and import a stronger advocacy element to our proceedings.

All of us have at some time been humbled, fascinated and often outraged by the plight of children whilst working overseas. Our College's training relationship with VSO remains one of its most progressive ventures, which ICHG is proud to be associated with. Our younger colleagues' returning VSO reports are always worth hearing and it was good to see the College President joining us to hear them this year.



ICHG meeting chaired by Matthew Ellis. *D.Devakumar*

The year witnessed the passing of David Morley and it has been marked by a memorably warm tribute led by Tony Waterston at our excellent Winter Birmingham Meeting and the inauguration at Warwick of the David Morley Student Bursary and the first Morley Lecture given by Prof Margaret Lynch on Child Safeguarding Internationally.

As most of our members are aware we have used CHILD 2015, the information network we support, to stimulate discussion around issues ICHG are addressing in meetings. Prior to the Warwick meeting Oliver Jefferis' attempt to kick-start a child protection discussion on CHILD 2015 using Margaret Lynch's material was a notably slow burner.

This reticence of colleagues in more pressed circumstances to engage with the safeguarding agenda should act as a harsh reminder for us all of the pressing

need to advocate more on this topic. Looking away even when faced by a sea of biological disease is no longer tenable in the modern era.

In the plenary session Zulfi Bhutta's overview of the international child health agenda, over a video conferencing link from the regional WHO office in Rome, was uplifting and powerful. Video conferencing in the right hands need present no impediment to communication; indeed Zulfi's magisterial performance was positively enhanced by the authority lent by this medium.

For those of us with an investment in international communication ...the writing is on the wall...or rather on the screen...hook up, save carbon and money and lets do more of it. So watch out for a videoconference linked guest speaker in 2011.

It was also gratifying to note both Richard Horton and Anthony Costello talking to other forums during this, more focused, three-day conference and there was a moving session on the detention of child asylum seekers. It seems that the global agenda has arrived in the College and we are pushing at open doors. Whilst our meeting remains a useful focus for members and an excellent opportunity for overseas and training colleagues to present work in progress we might use our collective voice to resound a little louder than at present.

Having just completed *Bury the Chains: Prophets and Rebels in the Fight to Free an Empire's Slaves* by Adam Hochschild (highly recommended) I am moved by this account of what can be achieved by a relatively small number of people focusing on a just cause whose time has come.

Child deaths are diminishing almost everywhere yet countries mired in conflict are going backwards in terms of child survival. In this ever more connected world we can no longer tolerate the brutalization and death of children and young mothers barely out of childhood themselves.

Our winter meeting will focus on the prevention of harm to children and young women caught up in conflict zones. Your committee is looking at an advocacy piece, which will be distributed electronically prior to the meeting using our e-news-bulletin system. Do please look at it prior to the meeting so we can have a focused discussion on the day. See you then

Matthew Ellis, Bristol.

## Voluntary Services Overseas

VSO is the leading independent international development organisation that works through volunteers to fight poverty in developing countries. VSO's approach involves bringing people together to share skills and bring about sustainable, lasting change. VSO was established in 1958 and since then over 30,000 volunteers have worked to tackle poverty around the world. At any one time, some 1,500 VSO volunteers are at work in 44 countries in Africa, Asia and Latin America.



Royal Victoria Teaching Hospital, a VSO partnership organization in The Gambia, West Africa. *H.Brotherton*

Experienced professionals work with VSO's local partner organisations to support local colleagues. VSO volunteers come from a wide range of sectors and backgrounds, from senior educationalists to irrigation engineers. The average age of a VSO volunteer is 41, indicating the level of expertise they bring to supporting local organisations and communities.

With an emphasis on maternal and child health VSO's work in health has four key principles:

1. Helping increase the numbers of better trained and supported health professionals
2. Helping improve the management of organisations and health systems
3. Enabling poor people to voice their right to health and demand better services
4. Facilitating research to drive changes to health policy and systems which will benefit poorer people in rural communities

VSO works with the Royal College of Paediatrics and Child Health to support paediatricians in higher specialist training to share their expertise. The RCPCH/VSO Fellowship scheme offers paediatricians in specialist training one-year opportunities to improve child health in developing countries. In February 2010 the 30<sup>th</sup> RCPCH/VSO Fellow began her work in Malawi, and Fellows have worked in Sierra Leone, Kenya, Cambodia, Indonesia, The Gambia, Uganda and Tanzania

UK paediatricians in ST3 or up, with MRCPCH are eligible to apply for the Fellowship. Feedback from previous Fellows is that the best time to go is post-MRCPCH, with one-two years' registrar experience. At this point trainees are in a position to continue building on Level 2 competences, and offer wider managerial, teaching, and clinical skills. Trainees can apply a year in advance to departing.

Not only does their clinical practice help more children benefit from better care, their training and service development work makes sure fewer children die from preventable causes. As a result they find that their Fellowship experience offers unique personal and professional learning:

"There are so many of my existing skills that were called upon and developed whilst in Malawi and I think my experience will contribute enormously to my future work in the UK. I've had a huge amount of clinical exposure which someone who just stayed in the UK would never hope to achieve"

Dr Olly Jefferis, RCPCH/VSO Fellow 2007 & 2010

For more information please see [www.vso.org.uk](http://www.vso.org.uk)  
[www.vso.org.uk/rcpchfellow](http://www.vso.org.uk/rcpchfellow)

