



Reproductive Health Matters

An international journal on sexual and reproductive health and rights

ISSN: 0968-8080 (Print) 1460-9576 (Online) Journal homepage: www.tandfonline.com/journals/zrhm20

Breaking through the development silos: sexual and reproductive health and rights, Millennium Development Goals and gender equity - experiences from Mexico, India and Nigeria

Bhavya Reddy & Gita Sen

To cite this article: Bhavya Reddy & Gita Sen (2013) Breaking through the development silos: sexual and reproductive health and rights, Millennium Development Goals and gender equity - experiences from Mexico, India and Nigeria, *Reproductive Health Matters*, 21:42, 18-31, DOI: [10.1016/S0968-8080\(13\)42743-X](https://doi.org/10.1016/S0968-8080(13)42743-X)

To link to this article: [https://doi.org/10.1016/S0968-8080\(13\)42743-X](https://doi.org/10.1016/S0968-8080(13)42743-X)



Published online: 04 Dec 2013.



Submit your article to this journal [↗](#)



Article views: 1748



View related articles [↗](#)



Citing articles: 1 View citing articles [↗](#)

Breaking through the development silos: sexual and reproductive health and rights, Millennium Development Goals and gender equity – experiences from Mexico, India and Nigeria

Bhavya Reddy,^a Gita Sen^b

a MPH candidate, Department of Maternal and Child Health, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, NC, USA. Formerly Research Associate, Gender and Health Equity Project, Centre for Public Policy, Indian Institute of Management Bangalore, India. *Correspondence:* bhavya@live.unc.edu

b Adjunct Professor of Global Health and Population, Harvard School of Public Health, Boston MA, USA; and Executive Committee Member, Development Alternatives with Women for a New Era (DAWN)

*The report on which this paper is based was undertaken by DAWN as part of its contribution to the Millennium Development Goals review process with links to DAWN's analysis and advocacy on sexual and reproductive health and rights. This is a slightly condensed version of the overview of the report, which describes in-depth research undertaken in Mexico, India and Nigeria in 2008–2010.**

The past two decades have seen a number of efforts at the global level by governments, international and national organizations and civil society to adopt a more multidimensional approach to development defined by freedom, empowerment and the fulfillment of human rights. Despite this, there have been many questions raised whether these efforts went far enough or deep enough.

The 1994 International Conference on Population and Development (ICPD) was a major turning point in the population and development debate, shifting the focus of policy-makers, researchers and advocates towards respect for human rights and promotion of equality and health, in particular, sexual and reproductive health and rights (SRHR). These commitments were further strengthened a year later by the 1995 Beijing Platform for Action that enshrined women's rights and gender equality in global development.

The Millennium Development Agenda in 2000, as defined by the eight Millennium Development

Goals (MDGs), as the key global policy frame for development assistance, presented a huge challenge to the implementation of the more expansive ICPD and Beijing programs. As evidence of the difficult policy environment, the Cairo goals were excluded from the MDG roadmap adopted in 2001.

It has faced considerable criticism for a number of other limitations and omissions as well. Among the dominant critiques is the argument that the MDG measure of extreme poverty (people living on under US\$1 per day) favors the lowest common denominator benchmark for progress, masking much higher proportions of people recognized by more comprehensive and meaningful measures of poverty. The application of uniform targets and indicators to countries at different stages of growth has also been faulted for being unsupportive and lacking relevance to divergent development trajectories. Others have argued that funds and political will channeled to highly selective, narrow subjects undermine support for systems strengthening and inter-sectoral approaches to sustainable development.

Along with many other members of civil society, DAWN has challenged the targeted, technocratic approach implicit in the MDGs, cautioning against the consequent emergence of development 'silos'. Gender equality by the MDG definition is confined to one goal with targets and indicators for women's political representation, education and employment, de-linked from its instrumentality and inherent necessity to fulfill all other MDGs. DAWN, like others, has also been deeply concerned about the MDG agenda's regression of the complex and integrated approaches to addressing women's rights and sexual and reproductive health and

*Authors of this content by country are as follows. Erika Troncoso for the Mexico report; Renu Khanna with Anagha Pradhan and Lakshmi Priya for the India report; and Ngukwase Surma and Mary Okpe for the Nigeria report.

rights. The failure to address gender-based violence, abortion rights, sexual health and rights, including gender identity and sexual orientation, or the needs and rights of young people, and instead defining reproductive health solely under the purview of maternal health, are among the critical omissions under the MDGs.

Despite these weaknesses, it must nonetheless be recognized that the MDGs have to some extent synthesized diverse development priorities and been a tool to hold governments accountable for meeting the most basic needs of populations, and for galvanizing a considerable amount of political will to meet measurable targets. The extent to which national governments prioritize the MDGs and the impact on national agendas, however, varies greatly across regions and countries.

In 2005, DAWN was beginning to be alarmed by the resurgence of population control programs and rhetoric in some developing countries that had played an influential role in the adoption of the Cairo agenda. Moreover, we were concerned over what might predictably be an ‘uneven’ realization of ICPD and Beijing outcomes across the developing world. Five years later, based on preliminary data from research conducted in Mexico, India and Nigeria we declared the ICPD as one of the biggest policy victims of the MDGs.

The aim of our research was to examine, in three developing countries whose capacities, structures and socio-cultural and political dynamics varied hugely, how the MDGs and anti-poverty agendas and programs affected the implementation of national policies and programs specific to SRHR and gender equality goals, and whether they have favored the adoption of SRHR policies or fostered the strengthening of pre-existing SRHR initiatives. Designed as policy-oriented research, the studies had an additional objective of building the knowledge of sexual and reproductive health and rights advocates at both national and global levels.

In 2009 and 2010, the researchers shared their data and insights on the functionalism engendered by the MDG ethos, including the fragmentation and isolation of important social and economic development issues linked to SRHR and gender equality and equity. By then, it was becoming clear that what initially had appeared to be a problem of mismatched policy goals and state practices – or a disjuncture between global and local discourses on the MDGs – should be described more aptly as “siloization”.

Methodology

Country-level work began in September 2008. The project did not envisage doing primary research, but was intended to analyze policy documents and conduct key informant interviews. In 2010, the Research Team came together again in order to consolidate and analyze the findings on the basis of draft country reports, and to develop the core arguments for DAWN’s advocacy at the UN High-Level Plenary Meeting of the General Assembly (MDG Summit) in September 2010 in New York.

The study in Nigeria reviewed health sector policies between 1999 and 2008 with reference to SRHR, and adolescent sexual and reproductive health, and their coherence with the ICPD Programme of Action. Policies related to poverty alleviation in the same period were also reviewed to assess the degree of their integration with SRHR policies. Both sets of policies as well as the overarching health sector reform were reviewed for coherence with the nation’s millennium development approach and agenda. State level research was conducted in Kaduna, one of the two Nigerian states that host the Millennium Cities Initiative and the Millennium Villages project initiated by Columbia University’s Earth Institute. Interviews were held with government officials at local and state levels as well as civil society organizations working on SRHR.

For the Mexico study, the research tracked the progress on SRH indicators at the national and state levels. Legal frameworks of abortion laws in the country were reviewed and abortion services provided in Mexico City were monitored. Three types of national social programs – conditional cash transfer programs, social services programs and infrastructure programs – were examined. To assess the impact of social programs on women’s lives, focus group discussions (FGDs) and in-depth interviews were conducted in Puebla, with beneficiaries of *Oportunidades* and *Seguro Popular*. Puebla was chosen because of its comparatively high maternal mortality levels, large numbers of beneficiaries of social programs, and poor ranking on the Human Development Index. Newspaper content analysis was conducted to assess the coverage of MDG discourse in the national daily *Reforma*.

The study in India was based on a review of the secondary literature, together with available data for a wide set of indicators that were tracked for the years 1990, 1995, 2000 and

2005. The indicators were broadly in respect to the macro-economic environment, poverty, SRHR and gender equity. Of the 28 states and Union territories, Tamil Nadu and Gujarat – two large states in the south and west of the country respectively – were chosen for state-level study. Interviews with government officials at national and state levels regarding MDGs, poverty, gender equity and SRHR programs were conducted, coverage of these issues in national and state level newspapers was monitored, and a review of social movements at state and national levels was done. Discussions about government programs were held with targets groups from low-income neighborhoods in Chennai in Tamil Nadu and Baroda in Gujarat. The choice of locations was largely dictated by where the country team coordinators were based.

Background

India has a long history of action on population and development and was the first country to introduce a national family planning program in the 1950s. Through the decades, family planning programs have adopted a number of approaches, some involving serious challenges to reproductive rights and human rights more generally, most notoriously during the period of the so-called ‘Emergency’ in the mid-1970s. The 1994 ICPD had an impact on many countries, and India was no exception. It energized both civil society and the government, and as a result, the central Ministry of Health and Family Welfare introduced a new population policy in 2000, marking a shift from demographic targets *per se* to an approach more sensitive to human rights and development. (National Commission on Population, 2000) Although the bogey of population control through family planning targets, incentives and disincentives still keeps rearing its head (albeit under less harsh terminology and names), in parallel, some key aspects of reproductive health have begun to receive attention. The introduction of the Reproductive and Child Health Program followed by the National Rural Health Mission has meant that, in the past 15 years or so, safe motherhood – a long neglected subject – and infant health have become central to policies and programs. (NRHM, 2005)

As in the other countries, the ICPD had a major impact in Nigeria, especially on civil society, and a number of organizations strengthened their

focus on adolescent SRH and the empowerment of young people. However the presence of military governments limited their scope and impact. The year 1999 marked a shift to a democratically elected government after years of military rule. The Millennium Summit in 2000 also led to important changes. Since its inception, the MDG agenda has been very closely followed by Nigeria’s national poverty eradication strategy and health sector reform. The government has also created a number of policies to address SRHR and adolescent SRHR in addition to its ratification of the Maputo Plan in 2005, which addresses SRH in the fullest context defined by the ICPD with respect to the life-cycle approach. (African Union Commission, 2006)

Partly due to its long history of feminist movements and civil society struggles against dictatorship, Mexico has been at the crossroads of progressive thinking and action in support of human rights and sexual and reproductive rights in particular. Mexico has had the historical advantage of its own revolution, having been as much against the Church as against the state in the 19th and early 20th centuries. Thus, Mexico was a key player in the ICPD, with resultant progress in the area of SRHR. However, in 2000 a significant shift in political power to a right-leaning government occurred after decades of one-party rule. Macro-economic changes and consequent health sector reform have had implications for commitments to SRHR. The growing influence of the Catholic Church as well as the newer evangelical fundamentalist churches, as in the rest of Latin America, has begun to pose major challenges to the secularity of the state, including its support for sexual and reproductive rights and health. There is a growing tension between the agenda of these conservative forces and the gains made by progressive feminists and lesbian, gay, bisexual, transgender, queer, questioning and intersex (LGBTQI) movements towards safe and legal abortion, and gay rights, including civil unions and marriage.

All three of the countries of DAWN’s study are large federal republics, represent the most populous countries in their regions, and are among the large economies of the world. Since the signing of the Millennium Declaration, they have all experienced various degrees of liberalization and increasing privatization of social sectors. Despite being at different stages of economic and social development, all three countries have high levels

of poverty and indices of inequality, and acute regional disparities in areas of human development. Maternal mortality has also been a critical issue on their national development agendas. Adolescents, youth and populations at reproductive age make up a large portion of their population structures, which presents both opportunities and challenges for sustainable development, and demands attention from SRHR policy and the formulation of the rights agenda. Given this background, DAWN's analysis aimed to explore and clearly spell out the tensions, disjunctions and disconnections that occupy the interface of the agendas for the MDGs, gender equity and sexual and reproductive health and rights.

Political and economic landscape

Since independence from the British in 1960, multiple periods of military and autocratic rule coupled with persistent corruption have critically challenged Nigeria's experience with representative democracy. Being oil-rich did not translate to lowering endemic poverty; instead economic stagnation, deteriorating welfare and civil unrest have characterized the development landscape for much of the country's post-independence history. While revenues from oil increased in the decades that preceded the Millennium Declaration, poverty worsened, and by 2000, national government figures placed 65.6% of the population below the poverty line. (Government of the Federal Republic of Nigeria, 2008) The year 1999 marked a significant political shift as, after 16 consecutive years of military rule, power was handed over to a democratically elected government. The People's Democratic Party, an economically neoliberal right-wing government, has been in power since then. Even so, in the past ten years, democratic processes have been slow to gain strength and legitimacy.

In Mexico, the Revolutionary Institutional Party ruled from the 1920s, but since 2000 the right-wing National Action Party has been in power. With a conservative national government and the growing political influence of the Catholic Church, the fact that the *Distrito Federal* (which includes Mexico City) has been governed by the left-wing Party of the Democratic Revolution since 1994 has been critical to shaping more progressive agendas. (Batthyany and Correa, 2010) In the same year its membership in the North American Free Trade Agreement took effect, and

Mexico became the first Latin American member of the Organization for Economic Cooperation and Development, furthering thereby its position in the global political economy. Since the signing of the Millennium Declaration, Mexico has adopted various reforms due to fiscal restrictions that have altered the functioning of the health system and social protection mechanisms administered through over 120 federal welfare programs. Some of Mexico's welfare programs have become viewed as trend-setters, such as the conditional cash transfer program, *Progres/Oportunidades*. (United Nations, 2009) Mexico was also harshly impacted by the global economic/financial crisis of 2008, which further increased the pressure for fiscal belt-tightening. Though public sector workers are covered by a social security financed health system and higher income groups choose from a burgeoning private health sector, public spending on health has seen a decrease, adversely impacting the functioning of the public health system, which serves a large section of population and the majority of the poor. Efforts towards universal coverage of health insurance in reality reach only 62.3% of the population. (National Population Council, 2009)

In India, the economic liberalization that began in the 1980s and took clear shape in the early 1990s saw decisive and sustained changes towards a more liberal market economy. Between 1998 and 2008, the country's GDP grew at 7.2%. But despite becoming one of the fastest growing economies in the world, the proportion of people below the poverty line has decreased only marginally. As per World Development Indicators, the headcount poverty ratio at \$1.25 indicated a decline from 54% in 1990 to 42% in 2005, but the absolute number of poor people has grown. Poverty estimates have been the focus of major ideological battles between neoliberal reformers and others, since they are viewed as indicators of the failure or success of economic reforms. In this regard, the national Planning Commission's estimate of poverty in 2005 at 27.5% generated considerable debate. As a consequence, the government was forced to set up an independent committee headed by a senior economist in 2009 to look into the estimates. The Tendulkar Committee, while agreeing that there has been a downward trend in the headcount ratio, significantly raised the rural poverty estimates to 41.8% in 2004–05. (Planning Commission, 2009) It was clear that the fruits of economic growth were largely accruing

to the urban areas, and the gap between urban and rural populations had grown significantly.

Income inequalities have also increased in the last decade, and in states such as Gujarat, where the private sector has been fuelling significant economic growth, the decrease in income poverty has not translated to a corresponding decline in human poverty,* nor has it improved consumption inequalities in rural areas. Increasing inflation, high levels of corruption and outstanding debts at the country level are current issues, with inflation and corruption lessening the impact of poverty reduction strategies.

In terms of health, out of pocket expenditure on health is responsible for pushing large numbers of people into impoverishment in India. (Balarajan et al, 2011) Yet the government has allowed the private health sector to proliferate alongside stagnant budgetary allocations to the public health sector. Public–private partnerships and health insurance models are increasingly looked at as methods to improve health care coverage in hard-to-reach and remote areas, which in effect impedes access, especially for economically marginalized groups. Public spending on health makes up only 20% of the total health budget in India but importantly, the failure of decentralized spending and under-utilization of allocated funds is one of the identified impediments to federal budgetary increases on health.

In Nigeria, a major constraint in improving health care has been attributed to the three-tier functioning of the public health system with the responsibility of tertiary, secondary and primary health care given to federal, state and local governments respectively. Though improving primary health care has been a priority in the nation's health sector reform, political will is concentrated at the center, dissipating as it moves to state and local governmental levels. Also, given that Nigeria is a new democracy, it has a lower capacity to effectively utilize decentralization for programmatic action.

*The Human Poverty Index was first introduced in the 1997 UN Human Development Report and for developing countries it is essentially a measure of whether people are being *deprived of* a long and healthy life, depth of knowledge and understanding about the world around them, and a decent standard of living. It therefore represents an inverse correlation to the Human Development Index. (UNDP, 1997)

Therefore when health systems are subject to decentralization, this can have exacerbating effects on existing regional disparities and urban–rural divides. While decentralization is known to improve access to services, especially where women's mobility is limited, evidence from Latin America suggests that at local levels the mind-sets of health providers are influenced by dominant cultural norms (Batthyany and Correa, 2010) which can negatively impact health-seeking behavior for SRH services. In all countries, the effective functioning of referral systems is affected, with the movement from basic to complex services divided between local and state governments. (Batthyany and Correa, 2010) This is compounded by poor provisioning of public health services in the distribution of manpower, drugs and equipment at the local level, thereby increasing the burden on secondary and tertiary care.

All three countries are characterized by declining or stagnant public spending on health at the federal level, weak political will towards implementation of public services at local levels and unregulated privatization of health services, creating a considerable challenge for poverty reduction and improvements in human development.

Adoption of the MDGs into policy

Nigeria

In efforts to rebuild the nation after military rule, the Nigerian government entered into arrangements that resulted in high donor dependency in order to qualify for debt relief. The Poverty Reduction Strategy Paper prepared for the International Monetary Fund was based on implementing mechanisms of deregulation, privatization, liberalization and improving transparency and accountability. The National Economic Empowerment and Development Strategy (NEEDS) invited international donors and technical expertise to help resurrect deteriorating human development indices. Though a number of poverty alleviation policies have been adopted since independence, NEEDS was to initiate a comprehensive reform agenda for the nation, and corresponding documents for all 36 states and local constituencies were created. The MDGs were a central theme and beginning with the National Poverty Eradication Program in 2001, policies began to be framed in line with the Millennium agenda.

The health sector reform initiated in 2003 under NEEDS directly reflects the health MDGs, and the National Health Policy, revised in 2004, promotes the very same targets and deadlines. Political will towards the MDG agenda was strengthened further in 2005 when the government negotiated an \$18 billion debt relief package conditioned on MDG-related, pro-poor expenditure. In the same year, the Office of the Senior Special Assistant to the President on the MDGs and the Virtual Poverty Fund were set up to manage and direct all debt relief gains towards MDG-related expenditure, working directly or indirectly with federal and state ministries in addition to state MDG offices. A Conditional Grants Scheme allows states to avail of additional funds in defined areas. In 2007, former president Yar'Adua's 7-point agenda for development explicitly prioritized the MDG agenda, and the National Assembly set up committees specifically related to the monitoring and evaluation of MDGs. Between 2006 and 2008, the UNDP undertook an extensive costing exercise for the country in eight key sectors (agriculture, health, education, roads, energy, water resources, environment and housing) to define what it would cost the federal, state and local governments and the private sector to achieve the MDGs. In 2006 and 2008 two states in Nigeria were chosen to host the Millennium Villages Project and the Millennium Cities Initiative, introduced by Columbia University's Earth Sciences Institute, to become models for MDG achievement. There is therefore considerable evidence of very strong political will towards achieving the MDGs in Nigeria, and the MDG agenda is strongly integrated into government structures, policymaking and programmatic action.

India

In India the MDGs are mentioned only fleetingly in some national policies and programs and are completely absent in others. With five of the seven major international donors in India focusing on poverty reduction and the achievement of the MDGs, donor emphasis on the MDGs appears much greater than the government's. Nonetheless, the Planning Commission doubled the total budget for poverty reduction between the 10th Five Year Plan (2002–2007) and the 11th Five Year Plan (2007–2012). The current Plan's 27 national targets reflect coherence with the poverty reduction indicators of the MDGs,

but do not align on areas of gender inequality or reproductive health. Nor do indicators to increase women's empowerment correspond to MDG indicators, with no national target to increase women's participation in non-agricultural work or the ratio of women's to men's earnings. (Khanna, 2011)

Reproductive health falls under the National Rural Health Mission, India's flagship public health initiative, launched in 2005. While MDG 5 is mentioned in the program and maternal and child health have been at the core of its efforts, there are no direct references to MDG targets. Despite these disconnects, the current Five Year Plan sets out to address social security for the poor; universal primary education; enrolment in secondary education; the gender gap in education enrolment; adult female literacy and women's agency; nutrition; infant mortality; maternal mortality, reproductive health; HIV/AIDS, tuberculosis, malaria and other communicable diseases; and safe drinking water and sanitation. (Planning Commission, 2008) This reflects large areas of overlap between national and MDG agendas. Among the two states studied in India, Tamil Nadu's 11th Five Year Plan, while not mentioning the MDGs, has 20 monitoring targets that include 7 MDG targets and indicators, thereby showing greater cohesion than the national plan.

Mexico

As in India, the MDGs have not formally entered national policy discourse in Mexico, and they also appear to have had negligible policy impact. Classified as a middle-income country, Mexico's national figures show the country having achieved some MDGs, with the government raising the criteria under poverty, health and education to exceed the scope of MDG indicators. While this is true at the aggregate level, human development disparities within and between states are very pronounced, with 30% of all inequality (based on health, education and income) concentrated in 5 of the 32 states. (Reyes, 2007) The MDG agenda therefore may be more relevant to the states with poorer development indicators. At the federal level, the Council for Evaluation of Social Development Policy is responsible for determining the nationally defined measurement of poverty, which takes into account education gaps, access to health services, basic household services, nutrition, social security, household size and quality and 'social cohesion'

in addition to per capita income. (*Oportunidades*, 2010) Long standing poverty reduction strategies such as *Progresas* (2007), later known as *Oportunidades* (2002) that have coordinated interventions in health, nutrition and education have not seen modifications to align with MDG targets, but they nevertheless cover areas of maternal and child health (MCH) and primary and secondary education. In 2009, Chiapas, Mexico's poorest state, amended its state constitution to be based on the eight MDGs (UNDP, 2010), and has been carrying out an MDG adoption strategy in its State Development Plan, but there is little evidence of this nationally.

A newspaper content analysis conducted in a nationally circulated Mexican daily showed a rise in articles mentioning the MDGs only in 2005, coinciding with the mid-term country report, but not in other years. Only 34% of articles in the tracking years referred to the MDGs in relation to Mexico, further corroborating the lack of ownership of the MDG agenda. (Troncoso, 2010) Prioritization of maternal and child health, however, has intensified since the 1980s as a result of structural adjustment and market-oriented reforms that altered Mexico's approach to social development from universal protection to targeted assistance, (Batthyany and Correa, 2010) inadvertently cohering with MDG health priorities.

Poverty reduction strategies, gender equity and women's health and empowerment

The MDG framework is centrally defined by the subject of poverty, and regardless of the degrees of influence of the MDG agenda on the policy environments of Nigeria, Mexico and India, poverty alleviation plays a substantive role in national discourses on development.

Using gender as a lens is critical for assessing progress in the area of poverty alleviation. The impact of poverty is more severe on women, who earn less than men, are in more vulnerable forms of labor, are less educated, consume less, and have fewer means to overcome poverty. Without recognition of the gendered implications of poverty, poverty reduction strategies have contributed only to superficial improvements or even had a negative impact on women.

Policies in Nigeria, Mexico and India have recognized directly or indirectly the specific ways poverty impacts women, however, largely through three approaches: (a) reservation for women in

social welfare programs, (b) targeted income-generating programs for women through self-help groups, and (c) women as beneficiaries of conditional cash transfer programs. These approaches have had varied implications for women's health and empowerment and have been limited in addressing SRHR.

Reservations

India and Nigeria stipulate roughly 30% as a minimum reservation for women in government programs. In India this has resulted in some favorable outcomes in the national wage, employment and self-employment programs. Women have exceeded the mandated proportion of beneficiaries making up nearly 50% in the National Rural Employment Guarantee Scheme and over 70% in the national self-employment scheme. The rural scheme for families below the poverty line has contributed somewhat to equalizing wages between men and women. And in a country where poverty is caste- and ethnicity-specific, it has also been sensitive to the inclusion of socially marginalized groups (scheduled castes and scheduled tribes). Although the establishment of bank accounts for the payment of wages has largely been in a male household member's name in some states, (Khanna, 2011) it has been found to increase women's self-collection, retention and decision-making power over the use of a portion of their wages. (Pankaj and Tankha, 2010) This is crucially important in a country where one in five women lacks control over her earnings. It has also resulted, albeit unintentionally, in greater consumption effects compared to cash payments given directly to the male household member. (Pankaj and Tankha, 2010)

Yet a number of limitations in terms of women's health and empowerment are still observed. In some states, single, divorced and/or separated women have been excluded from enrolment due to narrow criteria for household eligibility, (Pankaj and Tankha, 2010) thereby excluding the most economically vulnerable. The long hours of physically intensive work, poor provision of crèches and toilets, combined with the absence of any health supplements, have contributed to lower participation rates of younger women with children. With a backdrop of high levels of anemia for women at reproductive age across India, in some cases the scheme has been perceived to even worsen women's health. (Khanna, 2011)

Self-help groups

Women comprise the majority in the national self-employment scheme in India, which has contributed to increasing women's access to micro-credit and income through the creation of more than 3.7 million self-help groups. This has been responsible for bringing over 92 million families, according to government estimates, above the nationally-defined poverty line since its inception in 1999. Nonetheless, it has failed to significantly impact women's ownership of assets or gendered division of labor. The usage of loans obtained through self-help groups, based on micro-studies, has also been gendered, with loans being used for dowry for female children and towards education more often for male children. Though some group members have additional roles as village health workers and members of patient welfare committees, self-help groups have largely been under-utilized for health promotion activities, especially in the area of SRHR. Policy efforts to increase women's ownership of assets have been made through the implementation of *Indira Awaz Yojana*, a national rural housing scheme for the poor, but there were operational challenges as the housing titles were allotted to women or in the joint name of the wife and husband while men largely continue to own the land. No national level data exist on women's ownership of assets, although some effort is now being made to fill this gap. (Swaminathan et al, 2011)

Conditional cash transfers

Adopted by the Mexican government since 1997 and more recently in Nigeria, conditional cash transfer programs are based on the principle that compensating for monetary and opportunity costs of education and basic health care will aid poor families in investing in human capital to overcome inter-generational poverty. (Holmes and Slater, 2007) Oportunidades, Mexico's key poverty reduction program, has been estimated to support nearly a quarter of the population (25 million). It has been credited with lowering poverty, improving the educational attainment of children and the health of families by making women the recipients of cash transfers in exchange for ensuring regular school attendance by children and preventive health care visits. It is gender-sensitive insofar as educational attainment of girls is stressed and much of the preventive health care is related to maternal and child

health. The interventions in health specifically involve nutrition for infants, children and pregnant or lactating women and health care includes mandatory family planning education for women and youth in order to avail of the program's financial benefits.

But barriers in the selection process are evident as well. Bias and corruption coupled with narrow eligibility criteria (e.g. primary education enrolment of children, condition of houses) have excluded some of the most marginalized women. Crucially, making women the principal beneficiaries of cash transfers, though widely accepted as being more efficient in improving the well-being of households, has been criticized for making women 'household poverty managers', utilizing the existing gendered division of labor and reinforcing women's roles as mothers and caregivers. (Batthyany and Correa, 2010)

Nigeria's program, In Care of People, reflecting similar guidelines, was initiated by the National Poverty Eradication Programme in 2007. Although the program language does not mandate women as beneficiaries of cash transfers, they usually do bear the responsibility as a result of the focus on child health and children's education. Nigeria's program, however, makes efforts to target women-headed households, households headed by people living with HIV/AIDS and victims of vesico-vaginal fistulae. The initiative offers not only cash transfers but skills training and micro-enterprise start-up funds, (NAPEP, 2010) reflecting awareness of the economic impact of sexual and reproductive morbidity and scope for addressing poverty more holistically, especially the nexus of poverty and health.

Millennium Villages

Although the MDG agenda permeates key policies and programs for poverty alleviation in Nigeria, closer examination of the country's Millennium Villages Project in the state of Kaduna was undertaken in order to see whether an 'ideal' MDG model for poverty reduction has the capacity to adequately address women's health and empowerment and incorporate SRHR holistically. Assessment of the project showed that it significantly impacted female enrolment in primary education, increased women's access to micro-credit, skills and agricultural inputs, and improved women's involvement in community decision-making processes. The beneficiary identification system addresses polygamous marriages with

the second and third wives of men, typically the more marginalized and less empowered, identified as heads of individual households entitled to equal agricultural inputs.

On the other hand, even though primary health care has been made available and accessible to women, and husbands are required to accompany their wives on at least one antenatal visit, services related to SRH are restricted to maternal health and family planning. The Project has also been faulted for not addressing adolescent SRHR despite the high prevalence of early marriage. A new partnership between the Millennium Villages Project and the UN Population Fund from December 2010 (UNDP, 2010) could potentially widen the scope of SRHR addressed, but this is yet to be assessed. The Villages model is considered a success and is being scaled up. But it remains highly donor driven (70% of total funding), and sustainability remains in question. (Surma and Okpe, 2010)

HIV and AIDS

In both Nigeria and India, there has been comparatively greater recognition of the linkages between poverty and HIV compared to other areas of SRH, with the exception of vesico-vaginal fistula in Nigeria, which has been addressed through income-generating activities and the cash transfer program. Nigeria's national FADAMA Project with the Ministry of Agriculture for poverty reduction includes the dissemination of information on HIV/AIDS as part of its capacity-building activities. The cash transfer program in Nigeria also targets households headed by people living with HIV. At the state level, Kaduna's Ministry of Poverty Alleviation has had limited coordination with the state Ministry of Health in terms of programmatic planning and action, yet appears to work with the State Agency on HIV/AIDS. In Tamil Nadu, self-help groups promote HIV/AIDS awareness but not women's health or SRHR issues. The recognition of the impoverishing effects of AIDS due to loss of work and economic opportunities is better recognized than from other SRH morbidities.

The Nigerian picture exhibits a multitude of programs, policies, ministries and agencies all working toward poverty alleviation, but with very little coordination and some duplication. The existence of silos in funding is also a barrier to integrated approaches to poverty and SRHR at the government level, even though there have been successful interventions by civil society

organizations on poverty alleviation more comprehensively. Poverty reduction strategies on the whole have failed to adequately address the relationship between poverty and health, or sexual and reproductive health and rights more specifically. While budgets for poverty alleviation have increased in India and Nigeria, public spending on health has been stagnant or decreased in all three countries.

Fragmentation of sexual and reproductive health and rights

Given fiscal restrictions and varying prioritization of the MDG agenda, the research looked at whether improvements in SRHR have been prevented or promoted.* Fertility remains high in some parts of all three countries and more pronounced among particular ethnic and caste groups. Contraceptive prevalence rates range from 15% in Nigeria to 72.5% in Mexico, while unsafe abortion is still among the leading causes of maternal deaths in all countries. The three countries also have comparably large young populations, aged 10–24 – 34% in Nigeria, 29% in Mexico and 30% in India. (PRB, 2006) Early marriage is widely practiced in Nigeria, in some of the poorer states and districts of India, and in parts of Mexico. It usually goes hand in hand with poor knowledge about sexuality and reproduction, and lack of empowerment and agency for girls and young women. In such contexts, comprehensive approaches to SRHR that include, inter alia, information, education and access to services are critical to meeting the sexual and reproductive health needs and securing the rights of young people. Drawing from studies in the 2000s in developing countries, Jejeebhoy et al (2013) concluded that while some progress has been made, there is a long way to go before countries can be said to be helping their young people achieve a successful sexual and reproductive health-related transition to adulthood.

Maternal and child health

Despite varying degrees of MDG influence on policy agendas, there has undoubtedly been increased

*The original MDGs did not include any reference to sexual or reproductive health, let alone rights. Therefore, women's and other civil society groups spent a number of years advocating for an MDG target on universal access to reproductive health which was finally included in 2007 as MDG 5b. (Nowicka, 2010)

attention to maternal and child health since 2000. In Nigeria, this is in part due to the unacceptably high prevalence of maternal and infant mortality. Even after the inception of the MDGs, maternal mortality, infant and under-five mortality continued to rise in the early 2000s. By 2005, the maternal mortality ratio stood at 1,100 per 100,000 live births, one of the highest in the world, and infant mortality at 79.5 per 1,000 live births, justifying the need for a strong MCH focus in public health programs. This was rolled out in Nigeria from 2007 in child health services, specifically childhood immunization. The Integrated Maternal, Newborn and Child Health Strategy introduced in the same year included a Basic Health Insurance Scheme that would provide free services for pregnant women, newborns and under-fives. Kaduna state introduced a flagship program for free MCH services with MDG-related funding. There is also the Safe Motherhood Programme, the National Vital Registration System, and the Making Pregnancy Safer Initiative. But with high fertility and adolescent fertility, poor contraceptive prevalence, early marriage, early sexual initiation and polygamy, there are wider determinants not being addressed under these policies.

Concurrent with the rise in maternal and infant deaths, developments to revive commitments at ICPD took place in Africa, operationalized through the Maputo Plan of Action. Though the Maputo Plan shows coherence with the MDGs, it goes far beyond the MDG framework. It promotes a comprehensive, life-cycle approach to SRHR, including for adolescents, advocates for an increase in health spending on SRH and emphasizes the importance of addressing poverty and poor SRHR as mutually reinforcing. It is important to note that one of the nine areas of action under the Maputo Plan – strengthening community-based SRH services – was dropped from Nigeria's national Plan of Action. Nevertheless, a host of national policies on gender, reproductive health and adolescent SRHR have been developed in the last decade in Nigeria, revealing a rich SRHR policy environment in the MDG era. Yet only maternal and child health have seen more policies converted into programmatic action. Given the environment of lowered public health spending, MCH has received financial backing, indicating a clear correlation between the institutionalization of the MDG agenda and of MCH initiatives. There is no available disaggregated data on health spending for SRH, yet it is clear that political

will and funding are being channeled towards two components of the MDG agenda i.e. MCH and HIV/AIDS, (Surma and Okpe, 2010) and not to the other elements of the Maputo Plan of Action. Sexual and reproductive health and rights activists in Nigeria continue to lobby with the government to implement the Maputo Protocol.

In India the National Population Policy 2000 was critical to the explicit incorporation of SRHR into policy. Unfortunately, due to the distribution of powers in a federal system and because health is actually a state-level responsibility, a number of states have adopted targeted approaches to reducing fertility enforced through disincentivizing mechanisms, reflecting the traditional belief that population growth is an impediment to social and economic development. Conversely, the state of Gujarat has developed a more gender-sensitive population policy, thanks to the long-term involvement of civil society advocates in favor of SRHR. India's World Bank-funded Reproductive and Child Health Program (RCH), first introduced in 1997, was also an outcome of its commitments to the ICPD. In addition to safe motherhood and child health, the program is meant to address broader SRH needs including treatment of RTI/STIs and adolescent reproductive health education. However, monitoring indicators were limited to infant and maternal mortality ratios and contraceptive prevalence rates.

Since 2005, the National Rural Health Mission has taken over this remit, with a strong leaning towards maternal and child health. Infertility care has been nearly absent, while as of 2008, only 3% of women had access to cervical smears and 2% to mammogram services. In line with its focus on MCH, the National Rural Health Mission instituted the *Janani Suraksha Yojana*, a national maternity benefits scheme using cash transfers for women choosing institutional delivery, which is meant to enhance access for socially and economically marginalized groups such as *dalits* and tribals.* Despite its achievements in raising the rates of institutional deliveries in the country, studies have shown that the poorest and least educated women have less chance of becoming recipients. Moreover, quality of care has been extremely poor in some cases. A strict eligibility criterion excludes women who are under the age

*Tribals is the accepted term in India for people who are viewed as the original forest dwellers, *dalits* the lowest castes.

of 19 and those with more than two children – an unfortunate throwback to the use of disincentives intended to promote late marriage and family planning.* It fails to address more fundamental issues of women’s limited control over their own fertility, excluding some of the most marginalized and vulnerable sections of women and undermining reproductive rights in the process.

HIV/AIDS and sexual rights

Despite other limitations, sexual rights have gained some legitimacy through legislation in India, with same-sex relations as well as sex work[†] being decriminalized in 2009. In Tamil Nadu, the health of transgender communities is beginning to be addressed by a state welfare board, a significant step toward recognizing alternate gender identities. Free medical check-ups for sex workers, men who have sex with men, and transgenders, and free sex reassignment surgery are also said to be provided in specific hospitals in the state capital. On the national platform however, there is still great discomfort about sexual rights. Even the decriminalization of sex work and same sex relations is perceived to be more influenced by HIV prevention, rather than the promotion of sexual rights. (Khanna, 2011)

While there has been political will and funding to address HIV/AIDS, which has necessitated dialogue on sexual health, largely through the National AIDS Control Program, this has not been integrated within a comprehensive SRHR framework. Though practically all other national programs under the Ministry of Health and Family Welfare have been merged under the National Rural Health Mission, the AIDS Program still functions independently, with state offices across the country. Donor and government funding increases have also been greater for HIV/AIDS than for basic services such as immunization, contraception and other aspects of maternal health care. And though the human rights of people living with HIV/AIDS are addressed, the reproductive health needs of women living with HIV are not mentioned. In 2005 the Protection of Women from Domestic Violence Act was passed, but the effects of physi-

cal and sexual violence on pregnancy and the spread of STIs/HIV are not addressed by either of these programs. Women are to undergo routine HIV screening during antenatal care, but there is no screening mandated for their partners. Condoms still make up a very small portion of contraceptive usage among sexually active populations, female sterilization being the most common method adopted. (Khanna, 2011) Therefore, instead of a holistic SRHR framework, policy and programs are caught between two silos – maternal health and HIV/AIDS.

Role of civil society

Non-governmental actors have played an important part in shaping SRHR policies in India. A civil society review of ICPD in 2008 brought together diverse organizations and networks working on gender, health and rights, and population issues, which facilitated constructive engagement and strengthened dialogue between civil society and government. On the whole, the most significant opportunity for coherence between issues is through the ongoing development of rights-based legislation through pressure from social movements. The right to work, protection from domestic violence, and women’s participation in local government have already been the subject of legislation. (Khanna, 2011) The right to food, health and non-discrimination for people with HIV could influence the SRHR policy environment once passed, but there is little progress in this direction thus far.

Mexico’s active role in the ICPD and Beijing conferences and an ICPD follow-up commission involving state agencies, feminist NGOs and academics led to progressive action not only in the areas of antenatal and post-natal care and maternal morbidity, but also reproductive rights within family planning programs, post-abortion care, cervical cancer screening and gender-based violence. (Batthyany and Correa, 2010) Unfortunately health sector reform beginning in the early 2000s reduced universal health care, shrinking the broader scope of SRH to basic insurance packages limited to MCH. Subsequently, the reproductive health policy introduced by the conservative National Action Party also focused heavily on infant and maternal mortality. In this new political climate, higher insurance premiums were enforced for women at reproductive age due to institutional delivery and obstetric risks (Batthyany and Correa, 2010) and stringent cutbacks were

*In May 2013, the removal of conditionalities based on age and parity was approved for high performing states.

[†]Legal reforms to sex work followed from strong debate among sex worker unions and other advocacy groups on the benefits of decriminalization vs. legalization.

observed in the availability of SRH services for adolescents. In addition, reproductive health problems that are more likely to affect older women such as cervical cancer were also poorly addressed by the public health system. (Langer and Catino, 2006) Commitments to a life-cycle approach to SRHR as advocated by ICPD remain unfulfilled.

On the plus side, emergency contraception was included in the national family planning guidelines, and despite strong religious opposition, same-sex marriage as well as first-trimester abortion were legalized in the Federal District. In a strong backlash, however, 17 states amended their constitutions to recognize “the right to life from conception”. Yet the resistance to abortion rights is contradictory to efforts to reduce maternal deaths. A civil society–government partnership has been launched called ‘Maternal Mortality Watch’ which aims to analyze public policies, monitor maternal health programs, and increase accountability for reducing maternal mortality. (Troncoso, 2010)

Abortion

Despite efforts by governments to improve maternal health in all three countries, and given the contribution of unsafe abortion to maternal mortality, safe and legal abortion is still far from universally accessible. Although India was a pioneer in legalizing abortion,* lack of access to safe abortion services is still a critical issue. In Mexico, abortion rights have been a part of the feminist agenda since the 1970s and although there has been progress, legal restrictions remain for the majority of the country. In Nigeria, teenage pregnancy is on the rise while the conditions for legal abortion are still restrictive.† Mortality and morbidity related to unsafe abortion are a big concern when reproductive health care is largely about childbearing within marriage. The SRHR framework, already fragmented by this

*The Medical Termination of Pregnancy Act (1971) was amended in 2002 and 2003 to include approval of medical abortion, decentralizing regulation of abortion services to the district level and punitive measures to prevent unsafe abortion. (Hirve, 2004)

†However, Imo state passed a very liberal abortion law in August 2013, which states that a woman “shall have the right to determine the processes concerning reproduction in her body.” Opposition forced it to be withdrawn again very soon afterwards, however. <http://dailypost.com.ng/2013/08/28/governor-okorocha-under-fire-for-passing-abortion-bill-into-law/>.

narrow focus, has been weakened further through the separation of abortion rights from its role in fulfilling safe motherhood.

Adolescent health

Another major aspect of the fragmentation of SRHR is to do with adolescent health and rights. Despite early marriage and childbearing in all three countries, adolescent SRHR is not being addressed seriously or linked with broader SRH outcomes. All three countries have developed adolescent health programs, but the implementation of adolescent SRHR programs is influenced by the political parties in power, in addition to other conservative and religious forces.

In Nigeria, an HIV/AIDS Family Life Education program was developed along with other policy initiatives around adolescent SRHR; however, there has been reluctance to implement the program due to public reaction and opposition from faith-based organizations. Despite the Adolescent Health Policy and the National Youth Policy coming into effect in 2007, there is no dedicated budget for these programs either. In Mexico, incentives for adolescents to finish high school include mandatory educational workshops on SRHR. (*Oportunidades*, 2010)

In India, the current Five Year Plan aims to empower adolescent girls through awareness on health, nutrition, skills development and ‘youth affairs’. Yet adolescent mothers are excluded from the conditional cash transfer program for institutional deliveries in some states. The Integrated Child Development Services, a long-standing nutrition program largely targeting pregnant and lactating women and infants, has introduced a scheme for adolescent girls, but the adolescent health component has low implementation rates. Moreover, adolescent reproductive health education is poorly implemented and the SRH needs of boys do not appear to be addressed by any programs. HIV/AIDS, on the other hand, has to some extent presented a basis for governments to justify the need for adolescent SRHR education. In more proactive states like Tamil Nadu, youth groups are planned for inclusion in HIV/AIDS awareness-building activities.

The lack of access to information on SRHR and safe SRH services, and the lack of agency and empowerment, especially among young women, are coupled with poor economic conditions for young people. In Nigeria (FGN, 2007) and India, (Planning Commission, 2008) youth unemployment

began rising in the late 1990s. In Mexico, 15–19 year olds make up the largest group not registered with any health insurance system (45%) in a climate of fiscal restrictions and severe cutbacks in adolescent SRH services.

In sum, the needs, health and rights of young people in all three countries seem to be marginalized by a lack of prioritization in the planning and implementation of programs, even when they are adequately addressed by policy (as in Nigeria). Though adolescents are included in programs to address HIV/AIDS in India and Nigeria, this does not apply to safe motherhood programs in all countries, with great ambivalence around the subject of adolescent pregnancy and motherhood.

Limited progress on the MDGs

None of the three countries is on track to achieve the MDGs related to poverty and health, except MDG 6 on halting the spread of HIV/AIDS, which is likely to be achieved in India and Nigeria. According to UNDP, Nigeria may also achieve the goals of universal basic education (MDG2), ensuring environmental sustainability (MDG7) and developing a global partnership for development (MDG8). But UNDP also notes that a critical barrier to achievement of the MDGs is the lack of up-to-date data on most of the indicators and limited funding for data generation and management.

In India, Tamil Nadu is on track to achieve MDGs 3, 4 and 5. There is no gender disparity in infant mortality in Tamil Nadu, unlike India as a whole, and there is higher enrolment of girls than boys in secondary education. (National Family Health Survey 2005-6) Tamil Nadu has increased investments in the public health sector, unlike Gujarat, which has allowed comparatively more privatization in health care, including for maternal health care financing. While access to antenatal care in Tamil Nadu is almost universal and 90% of women access post-natal care within two days of delivery, data from the rest of the country reflect slower progress. For instance, the proportion of women receiving full antenatal care in Gujarat decreased between 2002–4 and 2007–8, (IIPS, 2010) and the quality of obstetric care under public–private partnerships has been heavily critiqued. (Khanna, 2011) In Gujarat, malnutrition among tribal women is a staggering 94% (compared to 32.2% for all women) and 83% of children are underweight.

Measurement of progress on the MDGs is based on national averages, which mask a number of intersecting disparities and inequalities within countries, (Kabeer, 2010) based on geographical region, ethnicity, class and caste. In 2008 in India, the ‘Do Not Break the Promises Campaign’, a network of over 4,000 development organizations across 31 states, produced a citizen’s report on the achievement of MDGs (*Wada Na Todo Abhiyan*, 2010), providing evidence of regional disparities and the marginalization of socially disadvantaged groups. In a country where caste overlaps with poverty, a *Dalit* MDG Shadow Report also shows how *dalits* lag behind. (Khanna, 2011)

In Nigeria, primary education completion rates range from 2% to 99% between the northern and southern regions and different ethnic groups. (UNDP, 2010) Institutional delivery in Nigeria also ranges from as low as 8% in the Northwest to 74% in the Southeast.

In Mexico, around 75% of the country’s indigenous population is concentrated in the southern states of Chiapas, Oaxaca and Guerrero, which are less developed and have greater poverty. Maternal mortality can range from 27 per 100,000 live births in the state of Nuevo Leon to 128 per 100,000 live births in Guerrero. (Kabeer, 2010) In Mexico, the likelihood of unsafe abortion for a woman with less than five years of education and of indigenous origin is nine times as high as for other women. Therefore national aggregates and population averages can and do mask significant disparities in the achievement of MDG targets.

Conclusions

In Nigeria, Mexico and India, poverty reduction strategies have not challenged the root causes of gender inequality, but have perpetuated gendered divisions of labor and reinforced women’s roles as mothers. The interface between poverty and health has not been tackled effectively, and especially for women. Moreover, there has been very limited integration of policy on poverty and SRHR, with the exception of conditional cash transfer programs, which have had mixed results.

Although the Maputo Plan of Action advocates for the inclusion of SRH services into poverty alleviation strategies, and mainstreaming gender issues into socio-economic development, Nigeria does not appear to be meeting these commitments. While there have been some initiatives in

Nigeria to address the impoverishing effect of vesico-vaginal fistula and HIV/AIDS, efforts to address gender inequality and SRHR more generally through poverty alleviation strategies have been limited. With the MDG agenda influence being strong in Nigeria, the weak linkages between the health-related MDGs and gender equality have constrained the implementation of holistic SRHR frameworks.

Mexico's multi-pronged approach to poverty reduction to some degree includes SRHR components, but it is limited to the areas of maternal health and family planning information, with the struggle for safe and legal abortion posing a significant threat to improving maternal health.

India has made some attempt to address the linkages between poverty and HIV/AIDS but this does not extend to the rest of SRHR. There is also little intersectoral collaboration in interventions to address poverty, gender equality and SRHR in India, and there is a failure by governments to strengthen this link. Though social movements have contributed to broadening the space for discussion and action around social equity, they have also been fragmented in their approach to women's rights and addressing the linkages between poverty, gender and SRHR effectively.

All three countries have focused more on MCH, with other SRHR issues receiving much less attention, with the possible exception of HIV/AIDS. Excessive emphasis on MCH may have undermined attention to the health needs and rights of young unmarried women and men. While all countries have programs to address adolescent SRHR, in India and Nigeria sexual health and adolescent health are linked mainly to the prevention of HIV, and political will remains weak in implementing even these. It appears that the holistic framework of SRHR envisioned by the ICPD and Beijing Conferences has been reduced to the reproductive health needs of women under the rubric of maternal health.

Universal access to sexual and reproductive health by 2015, as defined by the ICPD Programme of Action, is not being realized in any of the three countries. Gaps and inequalities need to be considered against the backdrop of age, sex, socio-economic status, education, and ethnic, geographic and caste backgrounds, which the existing MDG framework does not provide. Finally, with the growing spread of religious conservatism, the pressure against governments addressing such issues as abortion and young people's sexuality has been growing, despite the inclusion of target 5b in MDG 5. At the same time, support for SRHR has been growing in many ways in civil society, through legal systems, through national and international human rights instruments and institutions. In this lies the hope that the SRHR agenda will be fulfilled for this and coming generations.

DAWN, in collaboration with the global women's health and human rights movement, particularly activists in the economic South, remains committed to the implementation, protection and expansion of the original ICPD agenda nationally, regionally and internationally. It is hoped that the country studies presented in this book will provide useful evidence to support global advocacy on SRHR and gender equality in the context of the upcoming Cairo+20 and MDG+15 review processes in 2014 and 2015.

Acknowledgements

Funding for this work was provided by the John D & Catherine T MacArthur Foundation, which does not however bear any responsibility for the content of the work. References for this chapter, in-depth reports on all three countries and recommendations for action can be found in the full report at <http://www.dawnnet.org/uploads/documents/SRHR.pdf>. This introductory chapter, slightly condensed, and with several additions of new evidence, is reprinted with kind permission of DAWN, who retain the copyright.