

Section X

Conclusion

Looking Forward

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With the UN goal of reaching sustained elimination of iodine deficiency disorders (IDD) only 18 months away, there is a clear and urgent need for continued, and enhanced, vigorous, disciplined, and persistent efforts by countries. The road ahead requires firm policy commitment at all levels, as well as diligent field level program implementation.

As seen in earlier chapters, the record of progress since the historic 1990 UN Global Summit for Children is nothing short of phenomenal. In a little over a decade, there has been a tripling of the number of households using iodized salt in the world, from less than a fifth of all households to over two-thirds in IDD affected countries. This means that two billion more people are now protected by the use of iodized salt. Within the same period, the number of countries where iodine deficiency is a public health problem decreased by 41%. However, the remaining difficulties and challenges to reaching the 2005 goal should not be underestimated. And, at the same time, countries and their multi-sectoral partners must be planning to make the existing achievements sustainable into the foreseeable future.

Newborns protected in 2003 : 80 Million

In the year 2003, close to 80 million infants born were protected from this scourge, as their mothers consumed iodized salt. This amounted to a saving of over a billion IQ points. The impact on infants and children, and the societies in which they live, being able to reach their genetic potential with improved learning capacity, physical well being and productivity has yet to be calculated. The World Bank has identified micronutrient malnutrition as the cause for an approximate 5% decrease in the Gross National Product (GNP) of countries with vitamin and mineral deficiencies at a public health problem level. Certainly correcting such

deficiencies will lead to an aggregate economic and social benefit, representing many-fold the return from the relatively modest investment needed for the elimination in IDD.

To paraphrase a well-known refrain from World War II:

Never has so much has been achieved for so many for so little in such a short time.

The credit of course goes to the national efforts in the developing regions of the world. In many of the countries, the health sector and the salt industry have joined hands; the international development agencies have provided technical support, and the civil society has responded to the challenges in bringing about this historic achievement. The global iodine program has been called a quintessential economic and social development effort involving all segments of society and benefiting all—rural and urban, male or female, young and old, poor and rich. It is a program that addresses the heart of human development and attacks not only poverty's symptom but also one of its causes. Nevertheless, as was seen in earlier Sections of this book, rural and poorer segments of societies are not yet receiving the full benefits.

Nevertheless, UN Secretary-General Kofi Annan has singled out iodine deficiency work as a model of public/private partnership for development.

Lest we forget, however, a third of the people in the world, especially those in the developing countries but also in the industrialized nations, are not using iodized salt. Some of them do not have access to iodized salt. Many face geographic, economic, cultural and other barriers. Most people do not yet know enough, or have forgotten, about the harmful effects of iodine deficiency. Future action must be led by consumer demand.

Newborns Not Protected in 2003 : 41 Million

The best estimates show that of the 110 national programmes, 27 countries have over 90% household usage of iodized salt, and 48 countries below 50%, with 35 in-between. An estimated 41 million annual newborns still come into the world unprotected from brain damage as a result of iodine deficiency while an estimated 2 billion people have inadequate iodine nutrition.

The challenges to reach the remaining third of the people before the end of 2005, the goal set by the UN General Assembly Special Session on Children, are considerable and cannot be over-emphasized. The truism that “the easy gets done first and the difficult remains to be done” aptly applies to iodine deficiency work. The urban, the more educated and more affluent tend to accept change more readily as they feel they have the power to make changes in their lives, once they are presented with evidence of harm inflicted on brain development by the lack of iodine and the benefit of iodized salt. It is those who have less power because they are poor, uneducated, in remote areas, or in conflict zones, who are the hard-to-reach, but they are precisely the people who need the protection of iodized salt most. For, they desperately need to have their children protected from brain damage in their effort to break the cycle of poverty-low productivity-low learning ability.

Backsliding Trends

A worrying trend has emerged in the last two or three years. In a number of countries, where progress was impressive, the number of households using iodized salt has declined. Some went down drastically, as much as 50%. This has been as true in the industrialized countries such as Australia, Canada, some European Countries and the USA, as well as developing countries.

A major challenge in IDD work is the need for continuing “advocacy” at the policy level to avoid the mistaken notion that fighting IDD was a one-time effort. The deficiency will return as surely as the sun rises, once people stop getting enough iodine into their body via the consumption of iodized salt. Lack of effective public education and demand creation for iodized salt may well be one of the reasons for “backsliding.” The lack of clarity and the confusion between visible goitre, which has long been recognized in history, and the invisible brain damage, associated with other health consequences, which was largely unrecognized as a public health issue before the 1970s, is another somewhat unique challenge in IDD elimination. The legacy of successful work in controlling visible goitre in years past has ironically created a perception problem in some circles. A sharp focus on brain damage, surprisingly, is still missing in some of the national programs. The fact that iodized salt is a commercially available product also poses the problem of competition from friendly or unfriendly fire of other commercially available products, some of which,

we are aware, possess vast resources for promotion and message delivery to the public. This issue is not yet fully recognised and taken up in many of the national programs.

The Tasks Ahead

In order to reach the 2005 goal, what are the tasks ahead of the international community?

Strategically, first of all, accelerated efforts must be made in the countries lagging far behind, especially those with unprotected annual newborns in the millions. Many of them are in South Asia but Africa has its share and so does the region of Eastern Europe and Central Asia. Then, there is a need to also:

- (i) sustain the progress already made;
- (ii) tackle the problems of countries backsliding in their iodised salt coverage;
- (iii) energize those getting close to the goal;
- (iv) address salt-producing countries so that *all* their exported, and imported salt, is iodized; and
- (v) finally, address the challenge of the small salt producers who account for up to a quarter of salt consumed in some countries.

An important International Meeting for the Sustained Elimination of IDD that took place in Beijing in October 2003 has emphasized a number of crucial issues for the challenges of sustained elimination. The consensus statement adopted in Beijing has pointed the way for IDD work in the period ahead. It spells out five specific areas that need urgent attention in the pursuance of the goal:

Five Issues for Sustained Elimination

1. *Securing and sustaining political commitment.* This is a continuing effort at all levels from central government to village council. Iodizing edible salt may involve a decision by the government but using salt is also a decision by those preparing and processing food. In many countries, most of the salt consumed is in a ready-to-eat form from processed foods so that salt used in its preparation, must also be iodized. Even with a 93% household iodized salt coverage, China has set an example of holding a periodic advocacy meeting every three years.

2. *Ensuring the supply of adequately iodized salt.* While the technology of iodizing salt is not complicated, producing and marketing

iodized salt to ensure access to all households and at affordable prices requires strategic planning and logistic support. Stopping the flow of non-iodized salt into the market is very important. Helping small producers to come to terms with iodization will entail both incentives and appropriate legislation and there are encouraging examples available (Section V).

3. *Social mobilization that leads to community participation and demand creation.* Consumer education, school health education and media coverage of IDD issues are needed to foster the behavioral norm of using iodized salt, the lynchpin for sustained IDD elimination. More focused messages for specific audiences are needed to bring about behavioral change. Economic, social and cultural barriers need to be identified and overcome (Section VI).

4. *Monitoring the quality of iodized salt and ensuring adequate iodine nutrition.* Surveillance of the iodine nutrition status including urine iodine determinations and the monitoring of the quality of salt is needed to provide the basis for continuing IDD work. Results from such efforts are vital for policy and program management decision and for continuing and renewing commitment (Sections IV, VII, VIII).

5. *Building national coalitions for sustained elimination.* Fighting IDD is a societal effort involving efforts across all sectors. In order to achieve and maintain effective prevention and control of the iodine status of populations, each country should have a multidisciplinary group to keep a constant watch over the iodine status, identifying areas for action, promoting collaboration among sectors, especially between health professionals and salt producers, and activating civil society involvement to facilitate and maintain the behavioral norm of using iodized salt (see Section IX).

Complementing USI

All public health measures aim at the overwhelming majority of the people; this invariably leaves out minority groups with specific circumstances. The global effort to eliminate iodine deficiency via the use of iodized salt is no exception. Universal Salt Iodization (USI) is the overarching goal. Where this is fully achieved, IDD will be eliminated. However, many countries, especially industrialized countries, are iodizing only the table salt. This will be insufficient, especially as the consumption of table salt is reduced, in response to advice to reduce hypertension, and will be particularly insufficient for the unborn infants of pregnant women.

But the iodine concentration in salt can be readily increased to allow for a reduction in salt intake as pointed out in Section III and IV.

In geographic areas devoid of salt and with little physical infrastructure it may take months and years before suitable vehicle for delivering iodine could be made available and affordable. In parts of Xinjiang Autonomous Region, China, for instance, an inexpensive device costing the equivalent of 25 cents that releases iodine gradually over a period of 12 months in salty liquid melted from rock salt for cooking, has been used as a temporary measure to protect newborns with demonstrable benefits. For specific vulnerable groups, such as seriously deficient expectant mothers, oral iodized vegetable oil is available to provide adequate iodine for a year. Intramuscular injection of such oil is effective for 3 to 5 years. In areas with high iodine intake, residents should not use iodized salt. And in areas where there are severe food shortages, emergency food rations may be the best channel for the population for periods. In times of conflict, and in refugee camps, iodized salt is not necessarily the immediate solution. As a human right, these mothers will need supplementation.

Nevertheless, USI is the long-term solution to sustained optimal iodine nutrition. In evaluating iodine status, a 90% household coverage has been used as the benchmark for success. In affluent urban areas, even a lower percentage may be sufficient as residents have access to a variety of foods with iodine content, e.g. sea foods, meat, vegetables and dairy products. On the other hand, in remote rural areas the same percentage means the poorest segment of the population who needs iodine most may have been left out altogether. Although a national coverage of 90% is the current marker of success, in some countries the last 10% may be concentrated in certain areas of the country, and a drive towards universality is needed in those circumstances, with specific targeting.

Salt an Equalizer

While the social and economic arguments for IDD work have been used at advocacy level, salt as an equalizer should be viewed as an effective entry point to breach the gender barrier in male-dominated societies. With considerable investment being made in female education, the education sector should take up the IDD cause so that the girls entering school would have the capacity to learn. There is little point in improving access to education, if young children enter the schooling system with impaired neuro-intellectual potential.

For the elimination of IDD to be successful and sustainable, this must be an effort of all society in each country: the consumer, the salt industry, public health authorities, governments, the media, academia, and civil society. In the UN system, IDD work occupies an important place in health and nutrition development. WHO's nutrition department takes a technical lead in this work. UNICEF's nutrition staff has played the major role in supporting country programs. But IDD transcends the nutrition and health units. It is a reproductive health issue for those in population work, as it can cause still birth, miscarriages and even maternal fatalities, in addition to giving birth to cretins. It is a mental health issue, as iodine deficiency is the major, preventable, cause for mental retardation. It is certainly an early child development issue as well.

The World Bank, the Asian Development Bank and the UN Industrial Development Organization have played a vital role in helping the salt sector in training and upgrading its capacity to take up salt iodization, including packing and distribution. FAO could play a more active role and UNESCO needs to assume the role of mobilizer for the education sector to improve the learning capacity of school children. The Gates Foundation (through UNICEF) and many bilaterals (CIDA, AusAID, USAID, Dutch Aid and JICA) will need to continue their support.

The crucial role of the Global Network for Sustained Elimination of Iodine Deficiency, the alliance of international organizations concerned with IDD elimination is self-evident for the period ahead. The Network should help with strategic planning and identify specific areas of action. Above all, it should keep up with policy advocacy and monitor global progress and support the creation of national alliances that carry out country-level surveillance and take action to move towards the goal and to sustain IDD elimination. The continued support of civil society, most notably the superb contribution of the Kiwanis will continue to play a critical role.

Towards the Millennium Development Goals

The UN Millennium Development goals have been internationally accepted as global ambitions in an unprecedented way, although funding from the industrialized countries remains inadequate. Micronutrient malnutrition, of which iodine deficiency is a major contributing factor, has implications in the reaching of 5 out of these goals: those aiming to eradicate poverty, achieve universal primary education, promote gender

equality, reduce child mortality, and improve maternal health. And IDD elimination has been identified as having one of the greatest chances of being attained.

With the problem clear, the impact understood, and the solution affordable and sustainable, can we in all conscience allow even a single child, let alone millions of them, entering our world and growing up without the iodine protection against brain damage? If the development community should fail to attain the goal of sustained IDD elimination, what prospects does it have in tackling the more complicated development tasks?

The time to act is now