Preventive Healthcare and Public Health

2

"To improve and maintain the health of the people, continuous education on the principles and practice of hygiene and environmental cleanliness is essential. Education is the most effective safeguard against physical and mental ill-health."

–Sri Sathya Sai Baba, Aug 28, 1976

The World Health Organisation estimates that if major risk factors for chronic disease were eliminated, at least 80 percent of heart disease, stroke, and type-2 diabetes would be prevented and 40 percent of cancer would be prevented. The choices we make as individuals and as a society have consequences for the world at large. Major risk factors for communicable and non-communicable diseases include alcohol abuse, tobacco smoking, indoor smoke inhalation from solid fuels, air pollution, unsafe sex, poor sanitation, high cholesterol, iron deficiency, being malnourished, low fruit and vegetable intake, high body mass index, and high blood pressure. These risk factors may result in infectious diseases (for example, AIDS, TB, and diarrhoea and dehydration) and non-infectious diseases (for example, cardiovascular diseases, diabetes, and hypertension). Risk factors for health problems vary from place to place; so do the diseases. Although we may have succeeded in decreasing mortality by creating better diagnostics and treatment options for infectious diseases, the morbidity from the burgeoning health burden of these non-communicable diseases is fast approaching the tipping point. Sixty percent of the world's deaths are attributable to this silent epidemic. These trends, which were initially seen among the developed nations, are now becoming a common sight in the developing world, which is already burdened by infectious diseases in the setting of poverty, illiteracy, and weak health care systems.

There is a growing need within health care systems at large to adopt a paradigm shift towards prevention and promoting healthier lifestyles. The Sri Sathya Sai Organisation has undertaken several public health initiatives such as drinking water projects, health education activities to promote a healthy lifestyle.

The SAINET Project in Kenya A new and innovative community approach to Malaria control through enhanced insecticide-treated Bed Nets (ITN) coverage in Africa

Background and Context

The new millennium has dawned with malaria as a major global health problem; more than 3.3 billion people are at risk in 109 countries around the world. The disease is estimated to cause 350 million to 500 million episodes of acute illness and about 1.1 million deaths worldwide every year, most of them African children. In addition to its death toll, malaria places a heavy economic burden on many endemic countries, contributing to the cycle of poverty and underdevelopment.

Following the global resurgence of the disease, the Roll Back Malaria (RBM) initiative was launched in 1998 jointly by the World Health Organisation (WHO), the World Bank, the United Nations Children's Emergency Fund (UNICEF), and the United Nations Development Programme (UNDP). However, country-level implementation of malaria control efforts has been severely limited because of a lack of resources. It is estimated that globally between \$2 billion and \$3 billion will be needed every year to scale up the response to malaria.

Africa carries up to 90 percent of the global malaria burden. Over one million children die from malaria every year in sub-Saharan Africa, accounting for at least 20 percent of all childhood deaths. Malaria accounts for 40 percent of the continent's public health expenditure, 30 to 50 percent of inpatient admissions and up to 50 percent of outpatient visits. Kenya ranks high among countries where malaria is endemic, with 8.2 million cases reported each year. Annually 34,000 Kenyan children below the age of five die from malaria, which translates to 90 deaths a day. Pregnant women develop severe anemia due to malarial infection.

Malaria prevention is known to be highly costeffective, with benefits exceeding costs by a factor of 10 or more. Mosquito bed nets provide the best preventive care (because the female mosquito that spreads the disease bites only during the night), and if nets are treated with insecticides, their effectiveness is greatly improved. The Division of Malaria Control of the Ministry of Health of the government of Kenya is promoting the use of insecticide-treated nets (ITNs) as a key strategy to reduce malaria cases and child mortality. However, malaria remains the most common reason for hospital admissions in the country. Only 25 percent of pregnant women and 24 percent of children under five were sleeping under nets in 2003.

The SAINET Project

The objective of the SAINET project is to support the RBM initiative and the efforts of the government of Kenya to increase ownership of insecticide-treated nets. The project provides ITNs (insecticide-treated mosquito nets) in a distinctive ochre shade, branded as SAINET, with the message of Sri Sathya Sai Baba: "Love All – Serve All," inscribed on the nets directly, and free of cost, to families in malaria-endemic areas, as a key strategic intervention in malaria control. Before the start of the project in Kenya, the national medical committee of the SAINET project carried out an assessment of the ongoing initiatives for malaria control, including those by UNICEF and NGOs like Public Services International (PSI), African Medical and Research Foundation (AMREF), etc., and had detailed discussions with the director of the Malaria Control Programme of the Ministry of Health. It was observed that although much support was coming to the sector for preventive care, including for increasing ownership of insecticide-treated nets, particularly among high-risk populations, the current level of

coverage of ITNs in the country was a meagre 6 percent (for ordinary nets it was about 22 percent). This was well below the target of 60 percent set by the Roll Back Malaria initiative and the Abuja summit. A key reason for this low coverage was the lack of affordability for the poor, particularly in rural areas, to acquire a bed net even at a subsidised price of Ksh. 50 (\$0.60). It was

also observed that the subsidised voucher schemes followed by most donor agencies were open to abuse and the poor in remote areas were often totally unaware of such schemes.

It was therefore decided that the SAINET project would focus on the following:

- Establishing an active partnership with the Malaria Control Programme of the Ministry of Health with a view to extending its outreach throughout the country.
- Free distribution of nets among the poorest and the most vulnerable.
- Direct distribution of nets to end users, using a community-based approach.
- Using a net saturation exercise (100 percent coverage) in malaria-endemic areas. Field research by WHO indicates that when 30 to 50 percent of the population use ITNs, 27 percent of the children are protected from malaria and cases of anaemia are reduced by 50 percent.

- Emphasis on raising community awareness of the effectiveness of ITNs, their maintenance and use, and local environmental management (e.g., clearing stagnant pools of water).
- Active follow-up and periodic revisits to the served communities to ensure heightened level of awareness, including retreatment of nets (where necessary), monitoring of impact, etc.

Implementation steps

· Assessment visits to selected villages and distribu-



tion of SAINET vouchers by Sri Sathya Sai Organisation to every family through district administration two weeks ahead of service.

• District administration sets up distribution centres (average 10 to 15 for every service) in primary schools, churches, community centres, etc.

• Travel during weekends by project team (100 to 150 Sathya Sai

volunteers) to distribution area along with truckloads of SAINETs, maize meal, and communityawareness bulletins.

- Full-day distribution of SAINETs and communityawarenessskitsforuse and maintenance of netsheld. Each family gets up to three SAINETs, depending on family size; most distribution services also provide 4 kg of maize meal to every family. District medical team and senior administration officials participate during each distribution.
- Return of volunteers the following day. Each service is conducted during a weekend over a two-to three-day period (Friday through Sunday).

Project Achievements

At the request of the Malaria Control Programme, the Namanjalala location in Trans-Nzoia district in Western Kenya was selected for the first SAINET distribution service. The chief guiding factors in selection were the remoteness of the area and widespread poverty, a high incidence of malaria (at least three children die every month in each village after the rains), and the area is not yet covered by any other donor agency.

After careful planning and preparation, the SAINET project conducted its first distribution service on June 11, 2005, covering a population of 16,800 in 2,200 households in 20 villages. Each family received, free of cost, two SAINETs and 4 kg of maize meal, the staple food in this area. Awarenessraising sessions were held in each village to inform the people about the use and maintenance of nets and the local environment. A total of 95 Sathya Sai volunteers came from different parts of Kenya to conduct the service. Five convoys, each comprising a Canter truck, a minibus, and two to three four-wheeldrive vehicles carried 12 tonnes of food supplies and 4,400 SAINETs to the remote villages. The distribution service was inaugurated by the assistant minister and M.P. of the area and was attended by the full complement of district medical and public health authorities.

The Namanjalala service was the first ever in Kenya to make available ITNs free to the poor on a significant scale to create a measurable health impact. Also, this was the first time that an almost 100 percent coverage of the 20 villages was achieved, using a community-based approach to reach the poor directly, using the principle of Grama Seva (serving the poor in villages) introduced by Sri Sathya Sai Baba in India. The medical faculty of the University of Nairobi and the government of Kenya have jointly initiated a research project to monitor the impact of this unique service among the population in 20 villages.

Following the highly successful first service, the Malaria Control Programme of Kenya requested the SAINET project to undertake service in all major malaria-endemic regions of the country.

The distribution service was gradually scaled up, and the largest single distribution service took place on October 22, 2005, when 20,500 nets were distributed to a population of 91,000 in the malariainfested Kilifi district of coastal Kenya. "Sai Ram, I have just discovered that you are truly a genuine brother, kind in heart and having the spirit to give and serve all with love. Let me take this opportunity to thank you and the SATHYA SAI ORGANISATION for the kind gesture extended to the people of Kilifi, and specifically to Bamba, the poorest constituency in Kenya. Surely, you have reached the poorest of the poor. By giving a net you have given a life."

> –Dr. P. Masaulo, District Medical Officer of Health of Kilifi, on January 3, 2006

By April 2006, Sri Sathya Sai Organisation in Kenya had distributed a total of 85,000 SAINETs, providing protection from malaria to 500,000 poor and vulnerable people in all malaria-endemic regions of Kenya.

Impressed by the performance of the SAINET project, the government of Kenya sought the services of Sri Sathya Sai Organisation in Kenya to distribute an additional 40,000 ITNs supplied by the Global Fund to a population of 91,000 in Lamu island off the coast of Kenya.

Lessons Learnt from the SAINET Project

- An epidemiological study on the impact of SAINET distribution on the incidence of malaria episodes was conducted in Kenya jointly by the Kenya Health Department and the University of Nairobi. The study revealed a drastic drop (by more than 50 percent) in the number of malaria episodes in the distributed areas measured through hospital admissions, outpatient registration, and primary school attendance.
- The SAINET project's approach to distribute nets by Sathya Sai volunteers to poor villagers directly without any intermediary proved to be most effective in reaching the poor.
- The SAINET project in Kenya was the first initiative in Africa that validated several key recommendations of the United Nations Millennium Task Force on Malaria (*Coming to Grips with Malaria in the New Millennium:* UN Millennium Project Task Force on HIV/AIDS, Malaria, TB, and Access to Essential Medicines, Working Group on Malaria, 2005):

- 1. Free (rather than subsidised) provision of insecticide-treated nets to the poor should be a policy priority for all donors in Africa.
- 2. In malaria-endemic areas 100 percent coverage (rather than targeting high-risk groups only) is essential for sustained malaria control.
- 3. Social partnerships between health sector authorities and faith-based organisations are important in widening healthcare outreach to the poor.

The SAINET project in Kenya presented a new model of preventive healthcare service for Sathya Sai Organisations, which would be replicated with success elsewhere in Africa and in other regions (notably in Lao PDR in southeast Asia and Gujarat in India). The model was characterised by the following:

- Addressing a national health problem
- Establishing a synergic partnership with the government at national, state, and district level early on, based on mutual strengths and advantages
- Conducting service at a significant scale that could create a measurable impact and earn national recognition
- Above all, sharing of selfless love by the Sathya Sai volunteers with the poor and vulnerable in most remote areas of Kenya and spreading the message of "Love All Serve All."

"Since independence, no body has come to help us in this way"

–Chief, Nyangama Division, during SAINET Service on 27 August 2005 in Bondo, Nyanza Province (Kenya)







Human Values-Based Water Education Programme

He who knows the source of water Becomes established in himself —Mantra Pushpam in Yajur Veda

Life is Water, do not waste a drop —An Ancient Proverb

Why Water Education?

Though 70 per cent of the earth's surface is covered with water, only 3 per cent is fresh water. Of this 3 per cent, only 1 per cent is available for use. Meanwhile, the world's population continues to grow from 3 billion in 1960 to 6 billion in 2000 and is expected to reach 9 billion by 2050. Over 1.2 billion people in the world today lack access to safe water supply and over 2.4 billion people lack access to adequate sanitation.

The poor pay dearly for water and cut back on consumption, often relying on as little as 10 litres per head per day to survive, while the rich may use as much as 250 litres. Diarrhoea, resulting principally from lack of water and poor sanitation causes 1.8 million deaths/year, mostly amongst children under the age of five. This is estimated to be about a third of total child deaths under the age of five in developing countries.

There is a growing understanding that only a fundamental change in behaviour and personal attitudes can reverse this situation. Water education can play a strategic role in bringing about positive attitudinal changes among both water consumers and providers, and in the longer term, can help develop a new water-use ethic in society. Children and youth could be the best ambassadors to bring about these attitudinal changes.

A Unique Human Values-based Water Education Programme

The UN Charter is replete with values such as equality, freedom, peace, and solidarity, yet the world organisation was seeking a practical way of translating values into its many-faceted developmental efforts. The opportunity came when, in a bold move, a group of international experts convened by the United Nations (UN-HABITAT) in South Africa in 2001, working together with the African Institute of Sathya Sai Education (ISSE-Africa), unanimously adopted a human values-based approach to introduce water education in Africa.

Human values-based water education is an innovative approach that not only imparts information on water, sanitation, and hygiene, but also inspires and motivates learners to change their behaviour and make wise and sustainable use of water. The valuesbased approach seeks to bring out desirable human qualities, which could help in making desirable choices in water resource management. Nurturing values such as honesty, integrity, tolerance, responsibility, sharing, and caring in children during their formative years helps them to become caring and responsible citizens in the future.

The following years would see African educationists—teachers, curriculum specialists, and educational administrators—in a growing number of countries, such as Cote d'Ivoire, Burkina Faso, Ethiopia, Ghana, Kenya, Senegal, Tanzania, Uganda, and Zambia, enthusiastically embracing human values through the United Nations water education programme. ISSE-Africa played a key role in training African educationists from across the continent in imparting education in human values.

Following an independent evaluation of the programme conducted in 2004, the programme has been further extended to five more African countries in the second phase, bringing it to a total of 14 countries.

The success of the programme in Africa generated interest in human values-based water education in other regions as well. In December 2003, UN-HABITAT and the Asian Development Bank jointly organised a Regional Consultation in the Asia-Pacific region on Values-based Water Education in cooperation with the Institutes of Sathya Sai Education in the Philippines and Thailand. Among the participants were senior educationists from Australia, Brunei Darussalam, People's Republic of China, India, Indonesia, Japan, Kazakhstan, Cambodia, Lao PDR, Malaysia, Mauritius, Nepal, Pakistan, Papua New Guinea, the Philippines, Singapore, Sri Lanka, Thailand, Uzbekistan, and Vietnam. Since then the human values-based water education programme has become operational in the Asia-Pacific region.

The governments of Norway, Sweden, and a number of other countries are supporting this UN-HABITAT-implemented programme. More recently, the Asian Development Bank and the South East Asian Ministers of Education Organisation (SEAMEO) have joined their support for the programme.





IDEAL HEALTH CARE: A Focus on Preventive Care

Sri Sathya Sai Baba has inspired millions with His teachings of unity, love and service and has provided a vision for ideal healthcare based on five specific principles: universal, free, loving and comprehensive care with a focus on prevention. Guided by these principles, He has established a comprehensive medical care delivery organisation, including some of the most advanced super specialty hospitals in the world. In doing so, He has provided an exemplary model which we can follow to structure and deliver care in our local communities. This guidance is being provided at a most opportune time, when the number of patients with access to high quality care is plummeting despite rapidly escalating costs of care, when the issue of iatrogenic injuries is increasingly recognised, and when nations, such as the United States, are deeply engaged in national policy discussions about health care reform. Collectively, healthcare professionals need to understand and learn from this model in order to become positive forces in assisting their patients, communities and countries in achieving ideal health care.

Sri Sathya Sai Baba has increasingly emphasised preventive health care. Preventive health care falls into three categories: primary, secondary and tertiary prevention. Primary prevention includes those activities to protect against disease (e.g., hand hygiene and immunisations) and to promote health (e.g., adequate prenatal care or good nutrition). Secondary prevention aims to identify and detect disease at its earliest stages, thereby optimising the chances of successful treatment. Secondary prevention is the goal of much preventive health tests, such as diabetes screening and mammograms. Finally, tertiary prevention aims to improve the quality of life for patients with disease (e.g., appropriate glycemic control for diabetic patients).

In the case of rheumatic heart disease, for example, primary prevention is appropriate antibiotic treatment of streptococcal pharyngitis to limit the development of acute rheumatic fever; secondary prevention is early detection and treatment of acute rheumatic fever including appropriate prophylactic antibiotics and treatment of subsequent streptococcal infections; and tertiary prevention is appropriate treatment of rheumatic heart disease to mitigate potential complications and disabilities.

Ideal healthcare focuses on preventive care to improve the overall health of populations, rather than solely the treatment of acute episodes of illness or disease. Sri Sathya Sai Baba has said, "Instead of treating people after the onset of disease, it is better to ensure that they do not fall ill at all." Therefore, He emphasises the importance of various aspects of preventive care including: diet, hygiene, immunisations, cardiovascular and diabetes prevention, prenatal care, and spiritual discipline.

Sri Sathya Sai Baba has said, "By regulating your diet and avoiding certain bad habits, you can preserve health. Moderate food of the *sathwic* (pure) type, will promote mental poise and also physical happiness. *Mitha-ahaara* (moderation in food) is always to be welcomed." Today, dietary indiscretions are the cause of a multitude of medical problems internationally. In 2005, the World Health Organisation estimated that 1.6 billion adults were overweight and 400 million were obese. Once a problem of only the wealthy, obesity has rapidly become a central health care issue for people everywhere. Of particular concern, poor dietary habits are established earlier and earlier with 20 million children under the age of 5 overweight in 2005. Obesity can lead to many chronic diseases, particularly cardiovascular disease, diabetes, musculoskeletal disorders, and increases the risk for some types of cancers.

Another important aspect of preventive care is hygiene. According to the ancient proverb, "Cleanliness is next to Godliness." Clean food, water, hands, environment, and thoughts are critically important in facilitating good health. Sri Sathya Sai Baba has said, "Oral hygiene is not cared for. The mouth is the gateway of the physical mansion; if the gateway is foul, what can we say of the residence and inmates!" Food and waterborne diarrhoeal illnesses are rampant and often preventable across the world, particularly in developing countries. Sri Sathya Sai Baba has undertaken extensive water projects throughout India which has brought water to more than 10 million people. These projects have inspired people in countries throughout the world to embark on water projects in their own communities.

A vital component of preventive medicine is immunisation. Vaccines have been developed to protect against a variety of diseases, averting an estimated 2 million deaths globally in 2002. One of the greatest immunisation successes has been the worldwide eradication of smallpox. Routine vaccination for polio, diphtheria, tetanus, pertussis, mumps, rubella and measles is now available. Also available are immunisations against hepatitis A and B, Haemophilus influenzae type B, rotavirus, pneumococcus, influenza virus, meningococcus, human papillomavirus (HPV), and varicella. However, people are still suffering from vaccine preventable diseases. For example, despite the availability of the polio vaccine there continues to be flares in Asia and Africa as a result of a failure to vaccinate. Emphasising the importance of vaccinations continues to be a crucial role of medical providers.

Cardiovascular disease is the most common cause of death worldwide, representing 30% of all global deaths with an estimated 17.5 million deaths in 2005. Over 80% of these deaths occur in low and middle income countries. Sri Sathya Sai Baba frequently states that heart disease is caused by "Hurry, Worry, Curry." With these three simple words, He summarizes what can take hours for talented physicians to explain to patients. Condensing advice into small, catchy phrases facilitates creating an actionable and hopefully indelible memory in the recipient. As health professionals, we too can strive to impart preventive care information in clear, simple language that the patient can understand, thereby increasing the likelihood of them incorporating and adhering to it.

Another important chronic disease is diabetes, affecting 180 million people worldwide and resulting in 1.1 million deaths in 2005. The incidence of diabetic deaths is estimated to increase 50% over the next ten years. Adult onset diabetes is another illness that can be prevented through modulation of diet and exercise. Early diagnosis of diabetes is critical to effective management, with recent studies indicating that age, gender, family history of diabetes, history of hypertension, obesity, and physical activity are all associated with undiagnosed diabetes. Sharing this information with patients can empower them to improve their health.

Sri Sathya Sai Baba particularly emphasises the treatment of expectant mothers and the need for good prenatal care. In one discourse He stated, "My opinion is that mother and child care should be given top priority." According to United Nations Children's Fund (UNICEF), "At least 20% of the burden of disease in children below the age of 5 is related to poor maternal health and nutrition, as well as quality of care at delivery and during the newborn period." Insufficient care during pregnancy and delivery results in many avoidable maternal and child deaths and disabilities. In South Asia, for example, approximately 1/3 of pregnant women receive no prenatal care. Preventable diseases such as iron-deficiency anemia, malaria, HIV and tetanus cause maternal and neonatal deaths in developing nations. Therefore, improving the health of the mother and child through education and increased access to preventive care is essential.

In promoting preventive healthcare, there has been an increasing international movement to deliver patient-centred or family-centred care. In the United States, "patient-centred medical homes" are being promoted as new health care delivery models to improve the quality of care. In these models, the patient participates in medical decision-making, thus allowing them to become an integral part of the healthcare team. They are taught to take responsibility for their own health and are given the tools and support to do so with an emphasis on comprehensive primary and preventive care.

The Institute of Medicine, a non-profit organisation of the National Academy of Sciences serving as an advisor to the U.S. to improve health, defines patient-centred care as, "providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions." In other words, patientcentred care emphasises the importance of treating patients with love and respect. Sri Sathya Sai Baba has stated that the aim should be to heal the patient in body, mind and spirit, not merely to treat disease. Physicians need to treat the person with a medical condition, rather than treating only the medical condition itself.

When appropriately employed, health information technology (health IT), including electronic health records, electronic prescribing and telemedicine, can greatly facilitate our ability to provide high quality and safe care. Sri Sathya Sai Baba states that we should, "Help Ever–Hurt Never." Yet, it is well documented that well-intentioned health care professionals across the world cause significant morbidity and mortality to patients, particularly to the very young and sickest of patients, as a result of preventable medical errors. One commonly cited statistic from the Institute of Medicine estimates that there are between 44,000 to 98,000 deaths each year in the U.S. from errors made in health care. Statistics from other countries paint a similarly dire picture.

Health IT can assist healthcare professionals in making correct and safe medical decisions. Whether it is the provision of computerised decision support that averts a drug-drug interaction or a telemedicine consult that facilitates a correct diagnosis, health IT is a powerful tool to assist us in providing ideal health care. Electronic prescribing systems have been demonstrated to markedly improve the safety and quality of health care, reducing medical errors as much as eight-fold. Of course, over-reliance on health IT and poorly designed applications can result in unintentional harm to patients. Therefore we must focus on the guiding principles of ideal health care



and use health IT as a tool to support those principles rather than as an end onto itself.

Finally, and perhaps most importantly, Sri Sathya Sai Baba emphasises the importance of spiritual discipline in ensuring health. "The greatest disease (or absence of ease) is the absence of *santhi* (peace); when the mind gets peace, the body also will have health. So everyone who craves for good health must pay attention to the emotions, feelings and motives that animate the individual. It is proven that when one is full of positive feelings like love, compassion, forgiveness and forbearance and is bereft of negative emotions like anger, hatred and jealousy both physical and mental health improve remarkably. Swami Vivekananda said, 'You should have nerves of steel and muscles of iron.' That is to say, you should have hope and joy as an unshakeable resolution, not despair and dejection."

In summary, it is paramount that healthcare professionals focus more on preventive healthcare and health education in order to improve the health of our patients, our communities and our nations.

The Challenge of Global Epidemic of Obesity and Type 2 Diabetes

As we enter the year 2010 there is growing alarm from many nations and international health agencies on the increasing global rates of obesity and its associated adverse health consequences. The World Health Organization (WHO) estimates that there are more than 1 billion overweight adults in the world, mostly in developing nations, and often coexisting with undernutrition. There are 300 million obese adults (Body Mass Index (BMI)>30) with a greater proportion of these being women. In the USA, obesity rates are now staggering, with twothirds of the population overweight or obese and the rates exceeding 20% in 49 states. A recent review of the National Health and Nutrition Examination Survey data by King, et al showed that the adoption of a healthy lifestyle has declined in the USA with reduced vegetable and fruit intake, increased alcohol consumption and less physical activity.

Of concern are the rising rates of obesity in children and adolescents which increase the need to intervene early in life. A number of studies have now shown that obese children become obese adults, placing greater responsibility on adopting a proper healthy lifestyle at home. Obesity is associated with an increased risk for coronary artery disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, biliary and hepatic disease, obstructive sleep apnea, pulmonary dysfunction, and osteoarthritis. Recent studies show that obese children as young as 12 years of age have signs of the metabolic syndrome that increases the risk of diabetes and heart disease. Heart disease is the leading cause of death in men and women with 47% dying before they reach the hospital. In addition there is the mental stress from societal stigma and depression from being overweight that impacts ones overall quality of life. Healthcare professionals also need to treat these patients with love, compassion, and dignity.

The causes of increasing obesity are complex and involve both genetic and environmental factors. The regulation of appetite and energy expenditure involves an intricate interaction of various neuropeptides, adipokines, cytokines, intestinal hormones, the sympathetic nervous system, insulin, access to food, and the quality of food. WHO lists economic growth, modernisation (especially new technologies), urbanisation (more than 50% of the world population now live in urban areas) and globalisation of the food markets as potential factors. There is also a clear relationship between the level of education or socioeconomic status and the prevalence of obesity. Sedentary lifestyles and consumption of energy dense foods, high in saturated fats and sugars play an important role. Obesity is now mainly blamed on overeating rather than inactivity. However exercise is an important part of maintaining a healthy lifestyle. It is now clear that our lifestyle is leading to obesity and diabetes, and these issues need to be addressed if we are to combat the problem.

The prevalence of diabetes has been correlated all over the world to the rates of obesity. This is mainly with type 2 diabetes, which is caused by the dual defects of insulin resistance and beta cell dysfunction. While genetic factors are important in causing insulin resistance, it is central or visceral obesity that is emerging as a major factor. This type of visceral fat is metabolically active, producing many adipokines, cytokines and hormones that affect insulin sensitivity and cause inflammation. In general the Asian population has a lower BMI but also more visceral fat, so that an individual BMI cannot assess risk. There are now different BMI values used to assess obesity between different races.

Diabetes is associated with major microvascular and macrovascular complications. It remains the leading cause of new onset blindness, renal disease, peripheral vascular disease and the major cause of cardiovascular disease. While new therapies are being developed to treat high blood glucose (together with proper nutrition and physical activity) the rate of diabetes is rising very rapidly and the cost of care cannot be sustained even in developed nations. Driving this epidemic are the increasing rates of obesity globally.

Therefore the prevention of diabetes is a better strategy given the results of trials such as the Diabetes Prevention Program of the NIH and The Finnish Diabetes Trial. These studies show that lifestyle changes in combination with healthy diet, weight loss of 7-10% of body weight, exercise and awareness counseling can reduce progression from pre-diabetes to diabetes by 58%. A more recent study from Finland showed that implementing these approaches also worked over a three year period to reduce diabetes progression in a community setting.

What is required is a change in lifestyle that starts with individuals and families, their communities, nations as well as governmental agencies, nongovernmental organisations (NGOs) and industry. Lifestyle covers all aspects of a person, including physical, emotional, mental and spiritual well being. The challenges are enormous on a global scale but we need to start locally. Sri Sathya Sai Baba emphasises the important role of the mind in everything we do, hence the injunction to start with the right thought from the beginning. He says good thoughts lead to good physical and mental health. Our thoughts are affected by the foods we eat.

Healthcare professionals in the Sri Sathya Sai Organisation can start by increasing the awareness of devotees at weekly meetings by educating them on the importance of a healthy diet and exercise in combating the obesity and diabetes problems. Hands-on demonstrations of healthy food choices and preparation can be held. Children must be taught these lifestyle changes at home, therefore parental involvement is imperative. The Sai Educare initiatives can also address these lifestyle issues and get the children to adopt a healthy lifestyle. Reducing access to sugary drinks, saturated fat, deep fried foods and snacks and making sure that breakfast is eaten with regulated meal times also helps. Individuals who skip breakfast are more likely to gain weight. The approach has to be flexible and practical taking into account cultural preferences and available resources. Recent studies also show that overall caloric intake is more important in a weight loss programme than the current preoccupation with various macronutrient compositions in different diet plans. Decreased caloric intake combined with increased physical activity is crucial. Upon diagnosis of diabetes, it becomes important to screen other family members, especially in genetically predisposed ethnic groups such as East Indians, Asians,





Hispanics, Pacific Islanders, Native Americans and African Americans. Identifying someone with prediabetes is an opportunity to implement the lifestyle changes needed to reduce progression to clinical diabetes. Screening can be done by referring the individual to a physician or a healthcare facility. Those who have diabetes also should be counseled to follow their treatment plan and see their health care provider regularly for follow-up and complication prevention.

The global problem of obesity and diabetes will require a new mindset on the inherent value of a human being, the creative potential of each individual, and values such as truth, right action and love. Nations and their governments, international health organisations, public health departments and the multinational food industry all need to come together if we are to make progress. Not only is access to healthy food an issue, but socioeconomic factors, political factors, and resources used by nations need to be addressed. This type of global consensus is slowly gaining momentum but in the meantime we must treat one individual at a time with love, care, and compassion.

Selected References

- King DE, Mainous AG, Carnemolta M and Everett CJ. Adherence to Healthy Lifestyle Habits in US Adults 1988-2006.American Journal Of Medicine 2009; 122 (6): 528-534
- James PT, Leach R, Kalamara E and Shayeghi M. The Worldwide Obesity Epidemic. Obesity Research 2001; 9 Suppl4: 228S-233S
- 3. Patel RB, and Burke TF. Urbanization- An Emerging Humanitarian Disaster. NEJM 2009; 368 (8) 741-743
- US Obesity Trends. CDC: Obesity and Overweight for Professionals: Data and Statistics. Accessed online on July 30, 2009 at: www.cdc.gov/obesity/data/trends.html
- 5. McNeely MJ and Boyko EJ. Type 2 Diabetes Prevalence in Asians.Results of a national health survey. Diabetes Care 2004; 27: 66-69
- 6. Kershaw EE and Flier J. Adipose tissue as an Endocrine organ. JCEM 2004; 89 (6): 2548-2556
- ADA. Position Statement on Diagnosis and Classification of Diabetes. Diabetes Care 2009; Supp1: S62-S67

- Diabetes Prevention Program. Accessed online on September 20, 2009 at: www.diabetes.niddk.nih.gov/ dm/pubs/preventionprogram
- Absetz P, Oldenburg B, Hankonen N et al. Type 2 Diabetes Prevention in the Real World. Diabetes. Threeyear results of the GOAL Lifestyle Implementation Trial.Care 2009;32 (8): 1481-1420
- Katan MB. Weight-Loss Diets for the Prevention and Treatment of Obesity. NEJM 2009;360(9): 923-925
- Sacks FM, Bray GA, Carey VJ, Smith SR et al. Comparison of Weight-Loss Diets with Different Compositions of Fat, Protein and Carbohydrates. NEJM 2009; 360(9): 859-873

PREVENTION OF CERVICAL CANCER: Effective Screening in the Community

Cervical cancer is caused by infection with human papillomavirus (HPV). It takes 10 to 20 years from the time of initial infection for this cancer to develop. That gives us 10 to 20 years to pick up and easily treat precancerous lesions and prevent suffering. Over 290,000 women needlessly die of this disease yearly, and 80 percent of these deaths occur in the developing world. However, cervical cancer is a preventable disease with screening and treatment.

In 2005, the World Health Organisation (WHO) stated that there are approximately 125,000 cases of cervical cancer per year in India, with over 70,000 deaths. An article in the *Journal of the American Medical Association* indicated a 2 percent to 4 percent lifetime risk in Indian women.

The International Agency for Research on Cancer demonstrated that a low-cost, low-technology, and easy-to-teach procedure called VIA (visual inspection of the cervix with acetic acid) had sensitivity and specificity comparable to Pap smear screening. Additional studies demonstrated that healthcare workers (physicians, midwives, nurses, medical officers, etc.) could be trained in this technique and that treatment of premalignant lesions with cryosurgery or LEEP (loop electrical excision procedure) could be accomplished in a single visit.

PINCC (Prevention International: No Cervical Cancer) is a programme that trains local providers in these screening and treatment techniques that had been investigated and supported by WHO. The Sri Sathya Sai Mobile Hospital (SSSMH) provides the ideal infrastructure for the PINCC training that teaches the gynaecologists of the mobile hospital team to screen and treat the village women. Over time, and with regular use of VIA, the hope is that the incidence and burden of cervical cancer, the most common cancer among women in India, would decrease in the areas served by the SSSMH. Dr. Narasimhan, director of the Mobile Hospital recognised that such a service would be consistent with Sai ideal healthcare. In August 2009, the first visit by the PINCC team to the SSSMH was initiated.

Fifteen gynaecologists received the training, and all the equipment needed to continue screening and treatment was donated to the Mobile Hospital for continued use and screening.



The PINCC team will return every six months to continue training in this life-saving screening procedure for the doctors of the mobile hospital.

The PINCC team is also working in Africa (Kenya, Uganda, and Tanzania) and Central America (Nicaragua, Guatemala, and El Salvador), as well as in India. The goal is to stop cervical cancer by training and equipping local healthcare systems in areas of the world most plagued by this preventable disease.

Sri Sathya Sai Drinking Water Projects, India

"Water-The Elixir of Life"

The availability of drinking water is an important issue of concern for human health in developing and developed countries worldwide. Drinking water projects are one of several projects undertaken by the Sri Sathya Sai Organisation to serve society. The water projects started by Sri Sathya Sai Baba are an excellent testament to the tremendous service undertaken by the Sathya Sai Organisation. The water projects first started on a smaller scale in the village of Anantapur, Andhra Pradesh, India. Subsequently several such projects were initiated and **have provided drinking water to about 10 million people**! Here are the details of the Sri Sathya Sai drinking water projects in India.

Anantapur Water Project

In March 1995 Sri Sathya Sai Baba declared that fresh water should be made available in the village to relieve more than one million people who were walking miles every day just for fresh water. In just nine months, at a cost of US \$ 70 million, the project was completed, and more than 700 villages in the area rejoiced. The project, truly an engineering masterpiece, utilised more than 2,000 km of pipelines to direct water from 314 reservoirs and numerous storage tanks. Then upon the request of another 300 villages in the Medak and Mahabubnagar districts, Sri Sathya Sai Baba extended the water project to cover these areas as well.

Sathya Sai Ganga Water Project

In 2002, Sri Sathya Sai Baba created an entirely new and much-larger-scale project when he declared that a similar water project should be completed to alleviate the entire city of Chennai, Tamil Nadu in South India plagued by water shortages. At US \$60 million, the Sri Sathya Sai Organisation had the Kondaleru-Poondi canal (now renamed the Sathya Sai Ganga Canal) reconstructed, which brought water to Chennai again after 50 years.

East and West Godavari Water Project

More recently, Sri Sathya Sai Baba has initiated two more water projects. In 2006, he undertook a project to supply water from the Godavari River to half a million people living in 500 villages in the East and West Godavari Districts, Andhra Pradesh, India. This project follows essentially the same scheme as the Anantapur project. The East Godavari District was fitted with two intake wells at Purushottapatnam and Pamaleru, and together they supply over 300 villages. The West Godavari District draws from an intake well at Polavaram. From here the water is sent to the treatment facility at Hukumpet. The water is then purified and sent via pipelines to all the villages, supplying fresh and safe drinking water every day.

Latur Water Project

In 2007, the Sri Sathya Sai Organisation also undertook another project in Maharashtra, India providing fresh drinking water to the residents of Latur.

Important Highlights of Sathya Sai Drinking Water Projects

Anantapur		
ed 750		
900,000		
1,250,000		
US\$ 63 million		

East Godavari District

No. of habitations covered	212
Population covered	220,000
Total length of pipelines	535 km

Medak and Mahabubnagar

1,000,000
2
640 sq. km
US \$ 11 million

West Godavari District

No. of habitations covered	240
Population covered	470,000
Total length of pipelines	640 km

Sathya Sai Ganga (Chennai)

Population covered6.7 millionProject costUS \$ 63 million

Although the objective of the drinking water projects was simply to provide fresh drinking water, it also inspired several people around the world to help others. For example, one person hailing from the Chittoor District, Andhra Pradesh, India, started mobilising people in various villages to tackle the water problem there. Another person spearheaded a similar drive in the Kolar District in the State of Karnataka, India. There are many



other such local efforts in India. It is hoped that in the years to come, such schemes would multiply both in number and in magnitude all over the world.

This is indeed the case. In 2006, the details of the Anantapur water project were presented in front of the assembly of the World Water Forum. The gathering was astounded by the breadth and efficiency of the Anantapur project. They were also deeply impressed that private funding was drawn and that the care of the project was completely and unconditionally handed over to the state without any reservation. UN-HABITAT, the parent organisation, subsequently named this project one of the ten best in the world.

India

Andhra Pradesh

Over half of all groundwater sourced in India has fluoride levels above the recommended levels. As a result, many suffer from skeletal fluorosis, a condition where excess fluoride consumption causes damage to bone and joints, leaving many crippled and disabled. The Hyderabad Godavari district installed and commissioned a defluoridation plant in the village of Nalgonda district in August 2007. The plant supplies clean and safe drinking water to 4,500 people everyday.

Rajasthan

A water purification plant was installed in the village of Kaliyabheda by Bhilwara Centre on January 20, 2008. This plant will cater to the needs of 800 village people who have been prone to fluoride-generated diseases.

Sikkim

Under the Sri Sathya Sai Village Integrated Programme, Sathya Sai Youth and volunteers of Lingchom Centre under the West District of Sri Sathya Sai Seva Organisation, Sikkim, completed the construction of the pure drinking water project at Resham Gaon in March 2008, benefitting the inhabitants of Khujum Gaon, Toyang Gaon, and Gairi Gaon. A filter tank has been constructed at the source that releases pure drinking water continuously.

Tamil Nadu

As per Sri Sathya Sai Baba's directive to bring drinking water to the doors of economically weaker sections, a water tanker was sponsored by Sri Sathya Sai Organisation of Tamil Nadu to supply drinking water to city slums. This Sri Sathya Sai drinking water tanker of 6,000 litre capacity was flagged off by the Chief Minister of Tamil Nadu, Sri M. Karunanidhi, at the Secretariat of Chennai on October 29, 2007. The tanker is equipped with 17 taps and a platform on each side to enable people to draw water with ease.



Chennai Water Project

Water Purification Project: An initial survey of villages of the Kancheepuram district in Tamil Nadu area showed a lack of clean drinking water in the villages, and as a result, diarrhoea and vomiting were very common in the local population. The villagers had their own method of purifying the water, which was generally to allow the visibly dirty water to "rest" for 3 to 4 hours before they used it—because only then the mud settled down at the base of their vessels. Because of the importance of providing clean drinking water to the local village population, the water purification project became a priority, and one of the first projects that the Sathya Sai Youth took up in June 2007. Initially it covered eight villages of the Kancheepuram district in Tamil Nadu. Since then the effort has grown to encompass 22 villages and is still growing.

It is indeed no simple task to survey the villagers, get approval from village heads and the local Panchayat board, install water purifiers, and maintain them across 22 villages. Needless to say, it was made possible only by Sri Sathya Sai Baba's Divine Will, Blessings, and Guidance. The village elders and government authorities not only readily agreed to the proposal, but also offered all necessary support. The spontaneity with which everyone involved wanted to embrace the projects bearing the name of Sri Sathya Sai Baba moved the young participants deeply. For the Sathya Sai Youth volunteers, it was indeed a humbling experience to observe the reaction of relief and welcome that Sri Sathya Sai Baba's holy name evoked instantly even in such a remote region. The youth volunteers collected water samples and sent them for evaluation to government-authorised laboratories to test water quality. After testing the water at a government testing facility, there was no doubt that the villagers had to be provided with water purifiers. A company making such products supplied the needed Water Purion water filters. After careful analysis, water purifiers were installed in strategic locations in the villages, and in addition, three purifiers were also installed in schools.

.

Transformation through Information After installing the systems, the Sathya Sai volunteers went door to door and explained to the members of each family about the new facility that was set up for them and briefed them on how to use it effectively. Pamphlets in Tamil, the local language, were also distributed to every household.

Self-Sustaining Empowerment To ensure the longterm viability of the project, two village youth were selected in each village and trained to maintain the purifiers. Sathya Sai Youth still visit these villages to monitor the working of the purifiers. The highlight of the entire project was not just the water purifiers, but also the purification that it brought about in all those who participated—from the volunteers to the villagers.

Sri Sathya Sai Baba's Plan Includes Ecology, Environment, and Nutrition

In a bid to provide a long-term solution to widely prevalent malnutrition and environmental neglect, the Sathya Sai volunteers from Kancheepuram district in Tamil Nadu area planned another project involving the planting of tree saplings beside village homes. Sri Sathya Sai Baba graciously approved the plan and even suggested the species to be planted drumsticks (Moringa oleifera), papaya, and curry leaf (Murraya koenigii). Volunteers procured the seeds of the three species from Krishnagiri, stored them in a central location, and allowed them to germinate in specially prepared containers. From the storage location, the saplings were transported by trucks and distributed to about 700 families in villages. Sathya Sai Youth volunteers visited the villages every weekend to ascertain that the plants were cared for and growing well. These saplings have grown into healthy tall trees. The experience of seeing the team's efforts come to fruition so efficiently, effectively, and quickly has been a gratifying, inner eye-opener for everyone concerned.

• • • • •

Sathya Sai Service in Salem

Accessories and aids were distributed on June 4, 2005, to physically challenged persons at Sri Sathya Sai Community Centre, Salem by the Sri Sathya Sai Seva Organisation of Salem District of Tamil Nadu. Much preliminary work was undertaken by the members of the organisation to identify people who are hearing impaired, visually challenged, and physically challenged requiring artificial limbs, braces, and crutches. Patients requiring artificial limbs were taken to Trichy Multipurpose Social Service Society for necessary measurements and production of appropriate equipment to fit their limbs.

The entire function was heartwarming and emotional when the physically challenged persons received the accessories and aids.

Among the items distributed were: hearing aids for 9 people with hearing impairment, canes for 30 people with visual difficulties, crutches for 7 people, braces for 25 people, artificial limbs for 9 people with hand problems, artificial limbs for 20 people with leg problems, tricycles for 2 people, and a wheelchair for 1 person.

Uttar Pradesh and Uttarakhand

Two deep-bore (36 to 45 metres), good-quality hand pumps were installed at convenient points by Sathya Sai Youth. The villagers are very happy and grateful to Sri Sathya Sai Baba for this facility provided to them. Sathya Sai Youth have also been advising the villagers not to waste water, the precious gift of God, and to keep the area neat and clean.

North America

USA

Connecticut

Norwalk The Sathya Sai Centres of Manhattan and Scarsdale, New York, joined the Sathya Sai Centres of Shelton and Norwalk, Connecticut, to organise a health fair on April 2, 2005 at Hart Magnet Elementary School in Stamford, Connecticut. With unity and love, 17 doctors, 5 laboratory/clinical assistants, 1 diabetic educator, 2 nutritionists, 10 Spanish translators, and 58 Sathya Sai volunteers participated in this health fair. A total of 155 patients received medical care and health information. Screening booths were arranged for height/weight/BMI, blood pressure, asthma, vision, cholesterol/HDL/glucose, haemoglobin, and mammograms. In addition, preventive healthcare booths provided information and awareness about topics such as obesity/dietetics/nutrition, cancer, stress management, diabetes, HIV, coronary diseases, and hypertension. Family practitioners and specialists in paediatrics, cardiology, internal medicine, oncology, obstetrics and gynaecology, and psychology served the patients with loving care.

Impressed with the services provided by Sathya Sai volunteers, many patients requested the Sathya Sai Centres to hold another health fair before winter. The Principal of Hart Magnet Elementary School was pleased with the services because the patients were able to spend time with doctors from various disciplines and discuss their health problems. She felt that the health fair was unique because even those who buy expensive health insurance often do not get access to all medical services on the same day.

Florida

Tampa Bay The Sathya Sai Baba Organisation of America conducted a free medical camp in Tampa Bay, Florida on April 28, 2007 at the Homeless Emergency Project Community Center. During the day, 40 healthcare personnel and 75 Sathya Sai volunteers served 335 patients by providing personal consultations and health screening. After serving them breakfast, the patients were shown films on anger management, depression, healthy heart and diabetes.

The Department of Health provided free children's vaccinations on site. All visitors were given a canvas-cloth bag inscribed with the message, "Love All–Serve All" containing a T-shirt with the printed message "Help Ever–Hurt Never," personal hygiene items, boxed lunch, fruit and water.

Missouri

St. Louis A free mammography camp was conducted by the Sathya Sai Organisation in St. Louis, Missouri, on June 11, 2006, at Our Lady of Guadalupe Catholic Church. Mammography equipment was donated by the Barnes Jewish Hospital, under the guidance and support of the Siteman Cancer Center, Mallinckrodt Institute of Radiology, and Susan G. Komen Breast Cancer Foundation. The day began with a silent prayer. Thirty-four women underwent a mammogram. Health education was provided, and breast self-examination was taught to the attendees. An interactive educational presentation with posters and flip charts on osteoporosis, heart disease, nutrition, breast cancer, and cervical cancer was given. Handouts were provided both in English and Spanish on women's health issues. The camp was visited by the director of the health unit of St. Louis County, who applauded the efforts of the Sathya Sai Organisation.



A free digital mammography camp was conducted at Our Lady of Guadalupe Catholic Church in St. Louis, Missouri, on June 10, 2007. Full-field digital mammographyisthe current state-of-the-artscreening technology for breast cancer. A free mobile unit was used to screen 49 women. A team of 35 volunteers participated. Women's health education was provided under the supervision of 2 physicians. An interactive educational presentation with posters and a flip chart on osteoporosis, heart disease, nutrition, breast cancer, and cervical cancer was given. Blood pressure was also checked, and follow-up for the patients was arranged.

Central America

Dominican Republic

There is a nutritional programme for children with inadequate calorie intake in the Dominican Republic. Free mosquito nets, insect repellants, and other items are distributed to control mosquito-transmitted diseases like the deadly dengue fever. Help is offered to mothers, children, and the elderly with health problems. During festival celebrations food is served to all families, and Christmas every year is marked with the donation of toys and other gifts. There are free dental care programmes conducted specially for children. Small housing projects are undertaken, such as constructing a house for a needy family living in a cardboard shack. In addition, there are also regular free cataract surgeries.

This ongoing service activity extends to many communities such as Luisa La Prieta, Palamara, La Delgada, and Limon.

El Salvador



Inspired by Sri Sathya Sai Baba's mammoth drinking water projects in India, Sathya Sai volunteers provided drinking water to many communities to whom the government could not provide for many years. New wells are dug and storage tanks are constructed for providing the drinking water by pumps, via pipes and through taps. Each water project provides drinking water to approximately 90 to 400 families in a community. There are 12 such projects in the region which provide drinking water to approximately 2,000 families and 3 schools.

South America

Argentina

Sri Sathya Sai Baba says the best medicine is preventive medicine, and the best way to implement prevention in the community is through education in human values. Education in human values is the foundation for the development of a dignified life and the best way to inculcate healthy habits in the community. Once this foundation had been laid down, specialised workshops were developed for different challenges faced by modern society, such as alcoholism, drug addiction, domestic violence, AIDS prevention, hygiene and oral health.

Brazil

To address the lack of clean water supply in Montenegro, Sathya Sai volunteers initially provided two containers of water to every household. Later, the Sathya Sai Organisation, along with local community members, installed an extensive water supply network.

Paraguay

The Native Indian Community in the region of Chaco is located approximately 60 kilometres from the Concepción and approximately 380 km from Asunción. The community consists of about 80 families comprising about 350 people. This community does not receive any aid from the government or other agencies. Electricity and running potable water are not available in this community from the City of Asunción. People use the natural water sources which may be polluted. As a result, people suffer from several diseases. Infant mortality is relatively high. Sri Sathya Sai Organisation in coordination with doctors and medical students of the National University of Asunción, has provided medical aid to the community once a year since 2001. Furthermore, additional medical aid and medicines are also provided. Food items including rice, sugar, oil, flour as well as clothes, shoes, and blankets have also been distributed.

Since 2003, Sri Sathya Sai Organisation has been preparing and providing meals for approximately 400 patients at a mental hospital. Volunteers work late at night in selecting good quality vegetables and fruits from the donated stock every Monday. The vegetables and fruits thus selected last approximately for 2 to 3 days of meals twice a day for the patients at the mental hospital.

Since 2002, Sri Sathya Sai Organisation has been distributing lunch for approximately 500 to 700 patients per week at different hospitals in Asuncion city. On Saturday afternoons, food preparation including cutting of the vegetables and other activities are completed. On Sunday morning food is cooked and packaged in plastic trays. At around noon, the lunch is distributed to several hospitals. More than the food, it is the personal communication between the volunteers and the patients through the exchange of love which serves as a cure to the ailments people suffer from.

Peru

For many years now, there have been regular services such as visiting the homes of the elderly and of the blind, as well as homes run by the Sisters of Mother Teresa. Volunteers also visit psychiatric hospitals, maternity hospitals, and communities of Balneario de Ventanilla and Virgin de Cocharcas. They educate them on personal hygiene such as bathing, haircuts, trimming nails, and dental service.

Europe

Greece

On December 8, 2007, Sathya Sai volunteers visited the Perama area in the port city of Piraeus and distributed 33 bags of food, clothes, and toys to 27 children. The paediatrician of the team, who had a list of needy people, visited the families with children to give them health advice and vaccinate their children that day.

On December 15, 2007, Sathya Sai volunteers gathered in the foothills of Mount Hymettus in Attica and planted 188 trees and 100 acorns to regenerate the forest destroyed by a fire in 2007.

For the past 10 years, the Sri Sathya Sai Organisation in Greece has been organising special events on various occasions. Thus the annual spring celebration took place at the Institution of Chronic Illnesses in Agia Barbara, in the Aigaleo, South Attica.

On April 11, 2009, volunteers visited the needy people in Perama, Piraeus, and distributed food and clothing. That day our paediatrician visited 11 families in their residences and examined a total of 14 children and adults. Used laptop computers in perfect condition were donated to two children who excelled academically, as well as to an unemployed person. In addition, Sathya Sai volunteers continued their weekly private math tutoring for children, and continued paying regularly scheduled twice-monthly visits to the Chronic Illnesses Institution in Skaramanga Piraeus, to the Centre of Recuperation and Rehabilitation of Children (orphans and disabled) in Glyfada, to the home for disabled persons in Kallithea, and the Exarchia Cultural Centre for disabled youth in Athens. They are taught how to draw, and given lessons in paper cutting and pasting, as well as acting.



Blood pressure and diabetes check programmes are opened to the public on a regular basis at Sri Sathya Sai Centres to raise health awareness in the respective regions. Several walk-in health awareness programmes have also been organised in the country.

As part of the nation-building initiative, the organisation continues to focus on the following national projects:

- Drug Awareness Programme In conjunction with a university, a drug and alcohol awareness programme has been launched. The university has donated a number of videos in different languages to the Sri Sathya Sai Organisation. This programme is designed to prevent drug and alcohol abuse.
- Medical Awareness Programmes include diagnostic camps and counselling services for blood pressure, healthy heart promotion, and a prevention of blindness programme. The doctors and optometrists carry out detailed examinations with very sophisticated instruments for early diagnosis and advice for prevention. It is a very popular and well-attended programme in all the regions and is very well supported by local primary care health trusts. During 2009, four clinics have taken place in the London area and Southampton. More

than 1,000 members of the general public have benefitted.

- Blood Donation Programme For many years the Sathya Sai Organisation has been in the forefront of blood donation programmes. Recently, many Centres arranged for volunteers to donate blood as most people were away on holidays. The National Blood Transfusion Service has recognised the Sathya Sai Organisation as an important force in providing donors during the crisis, with many volunteers of a rare blood group who are ready to donate on short notice.
- Bone Marrow and Leukemia Awareness Programme – A national initiative working in partnership with the Anthony Nolan Trust to encourage more bone marrow donors to register. This has increased awareness in the Asian population that it is important to come forward and register their names.
- Cancer Awareness Programme Working in conjunction with Cancer Black Care. The organisation is working along with doctors from the Royal Marsden Hospital, known for its reputable cancer research.
- Working with Communities The organisation also helps to provide volunteers to other organisations, for example, the Association of Blind Asians, Age Link, and Mencap. The Sathya Sai Organisation sends volunteers and food for the monthly meeting that is held at the Royal National Institute for the Blind (RNIB) by the Association of Blind Asians.
- First Aid and Food Hygiene Training Courses These are being organised at the Centre level for members to train within their area. All members are encouraged to attend sessions. Many volunteers have been trained in this wonderful programme because it is important to have someone in the Centre who can deal with an emergency during functions and also to serve and prepare food that satisfies the local laws. The programmes are getting increasing traction, and most regions have conducted at least one training course in 2009.
- "Health in Your Hands" Workshop Centres are encouraged to invite a local GP/consultant on a regular basis to address the congregation on various health topics. This has brought a new health

consciousness. Many people now exercise regularly, eat healthy food, and have eliminated or substantially reduced smoking and alcohol consumption.

Africa

Nigeria

With the goal of providing loving and quality service to the remote slums of Nigeria, the Sathya Sai volunteers of Nigeria kicked off a pilot service project with a tour of a slum in Ajagunle, Lagos. Upon analysing the data acquired from the tour, a detailed implementation of the service project in four phases was planned. The four phases are (1) feeding of 300 families, (2) distribution of soaps/detergent powders/germicides to 500 families, (3) a medical camp, and (4) distribution of clothing/shoes.

Three of these above four phases are already in place, regularly serving and bringing joy to the less privileged. Very soon the fourth phase will also be started. Plans have also been made to extend this pilot service project to several other slums in different parts of Nigeria.

Sierra Leone

The Sathya Sai Organisation donated 550 wheelchairs to Alhaji Dr. Mohammed Tejan Kaba, president of the Republic of Sierra Leone, for the benefit of the many people that had lost their legs and arms during the conflict. The formal presentation of the wheelchairs to the president was made on September 19, 2006 in the Sate Lodge in the presence of the attorney general, ambassadors, the ministers of health, social welfare, gender and child development, and high officials of these ministries.

The president thanked the organisation for the much-needed service and donation and welcomed it to Sierra Leone. The presentation was widely reported on national television and radio.

Zambia and Kenya

The Sathya Sai School of Ndola, Zambia, with 720 pupils, has been mentioned in the Parliament as one of the top three schools in the country. School personnel participate in medical camps, feeding the poor, environmental cleaning, and volunteer work in churches and provide drinking water to the needy.

The 160 students of the Sathya Sai School of Kisaju, Kenya, participate in Education in Human Values workshops and environmental cleaning projects. They also take part in other activities such as distribution of blankets and providing drinking water to the local community. The Sathya Sai School of Uthiru, Kenya, with 176 pupils, participates in village cleaning, feeding orphans, and building small roads and take part in workshops on human values.

• • • • •

Water Education: Africa has been plagued with a serious water shortage, and with its population estimated to reach 1.5 billion in about 20 years, this looming crisis is threatening to become a major issue for peace and stability in the region. The African Institute of Sathya Sai Education in Zambia has launched, with support from the United Nations Centre for Human Settlement (UN-HABITAT), a very successful programme to impart water, sanitation, and hygiene education through human values. To sensitise preschool, primary and secondary school children to the importance of water for the survival of humanity, the programme is integrating human values in water education in the curriculum of the schools of Africa, starting with 6 countries – Ethiopia, Kenya, Zambia, Ghana, Senegal and Ivory Coast. The Times of Zambia wrote on January 20, 2003, "The human values approach to water education in Africa lays great emphasis on the values rooted in African culture, and trainees are encouraged to bring out their cultural values. The human values approach emphasises five universal core values as their basis. These are: Truth, Love, Right Conduct, Peace and Non-violence, which have numerous practical modes of expression." Impressed with the success of this pilot programme, efforts are now underway to expand the scope of this programme to the entire world (especially Third World countries), through the UN Millennium Task Force on Water and Sanitation. This second phase of the project ends on December 31, 2009.

Middle East

Dubai



On December 12, 2006, 25 volunteers from the Sathya Sai Group of Dubai participated in the Environmental Hygiene Programme organised by the Emirates Environmental Group (a non-governmental organisation, accredited by the United Nations Environment Programmes), Dubai. About 17,000 volunteers from all over the UAE, including individual families, educational institutions, and government and private organisations, took part in this huge campaign. Sathya Sai volunteers managed one of the four zones during the activity, supervising the work and providing for the needs of about 780 workers covering an area of about seven square kilometers. More than 40 Sathya Sai volunteers, many of whom had taken the day off from their jobs, participated in collecting trash, bagging it, and moving the trash bags to the roadside for pickup.

The following year, the Sathya Sai Group of Dubai participated in another large-scale environmental clean-up campaign on December 12, 2007. The Emirate Environmental Group organised the "Clean-up UAE 2007" campaign with the aim of mobilising over 20,000 participants from all walks of life at different natural and man-made sites across the seven emirates of the UAE.



Asia

Vaccination Outreach Indonesia has a high prevalence of hepatitis B, a serious disease caused by a virus that attacks the liver. The hepatitis B virus can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. The risk of death from hepatitis B-related diseases is greatly increased for those who become chronically infected during childhood. To assist the government in combating the spread of this disease and to ensure a brighter future for the children of Indonesia, the Sathya Sai Youth have embarked upon a mammoth project of vaccinating children nationwide against the virus. A pilot project was launched in Jakarta in 1997, wherein a modest number of 72 children were targeted. The vaccine is administered in three phases: the first inoculation followed by a second inoculation after a month, and the third four months later. Spurred by the success of this initial attempt, the Sathya Sai youth, at a national Sadhana camp, pledged to expand this programme into a national service project. The project has since advanced to its final phase, and to date, over 7,000 children have been successfully vaccinated. The parents of these children are happy that their children have been protected against Hepatitis B virus infection.

• • • • •

Fresh Water Project Sri Sathya Sai Organisation of Indonesia has completed a water project in village Mbuliloo, located in the Wolowaru district of the Nusa Tenggara Timur Province of Indonesia. For years, the people of this impoverished region had struggled to cope with the lack of fresh drinking water. The scarcity of potable water forced the villagers to survive on a well in a distant location, which only had toe-deep water to be shared among more than 234 families. The Sathya Sai Study Group acquired a privately owned well and built a tank to collect water from the well. From the tank, 900 pipes were laid over a distance of approximately 7 km to channel the water to individual houses, thus providing clean water to more than 234 families. The local authorities, on behalf of the villagers, submitted a formal letter of appreciation which reads, in part: "We could never have imagined that in this world full of politics, turmoil and social crisis, there are still people out there who care to help small, helpless people like us. We take this opportunity to express how delighted and thankful we are to Sri Sathya Sai Organisation that has given the greatest gift of kindness that we will never be able to repay. Many thanks from all of us, the people of village Mbuliloo."



Lao People's Democratic Republic

Dr. Yeoh of the Singapore Sathya Sai Organisation, met with the Lao People's Democratic Republic (PDR) Sathya Sai Organisation, Lao PDR government officials, and the governor of Xieng Khuang Province and received their support for distributing mosquito nets. It was decided that the target area for this mission would be in Phoukhout district of Xieng Khuang Province. Final detailed plans were arranged, and 5,000 treated, long-lasting nets were purchased. Although more expensive than the normal treated nets, these are ideal for the Lao PDR project, because the villages are so inaccessible. Also, plans were completed to purchase and transport 20 tonnes of rice for distribution in the villages. The team structures were developed. A medical doctor, Dr. Ho Soon Lye, volunteered to accompany the team and conduct a medical camp in the forward areas. The main party, consisting of 22 volunteers from Singapore, left Singapore on March 9, 2006. They were joined by 60 volunteers and others from Lao PDR and Thailand, besides a number of Lao PDR government officials and Buddhist monks. The distribution was done successfully over two days, March 11 and 12. The volunteers were divided into 12 teams, and these teams went in different directions with their route maps and briefs.



Dr. Ho Soon Lye set up a medical camp at the forward base. He saw about 200 patients in two days, mostly from 40 to 80 years of age. He found the people reasonably healthy. There were no signs of diarrhoea or heart diseases. There were, however, many people with skin diseases caused by overexposure to the elements. Most had ulcers and pains on account of fatigue. There also appeared to be cases of iodine deficiency. Antifungal cream, antibiotics, nutritional supplements, and dressings were provided.

concerns of the child. The medications are provided by the volunteers of the Sathya Sai Organisation. This project culminated in November 2005, coinciding with Sri Sathya Sai Baba's eightieth birthday.

Philippines



On August 10, 2003, 750 children and adults received treatment at the Fifth Sathya Sai Preventive Healthcare Medical Camp from a team of 100 doctors, dentists, ophthalmologists, nurses, pharmacists, and volunteers, coordinated by the Sathya Sai Organisation. Teacher-students and alumni of the Institute of Sathya Sai Education (ISSE), San Pedro, gave talks on health and hygiene and the practice of human values. Youth volunteers painted brilliant posters on human values and healthcare, which were displayed on the walls, and compiled tips for good health in a pamphlet that was distributed to all families. All patients received the prescribed medicines and multivitamins from the pharmacy, and food packets while leaving the camp venue. That day, the starting of the monthly Sathya Sai Health Centre (Sai Klinika Ng Kalusagan) at the ISSE San Pedro was also announced. The Klinika began operation on September 28, 2003 and served 68 patients on the first day.

• • • • •

Tuberculosis Project: On May 22, 2005, Sri Sathya Sai Organisation of Philippines launched the "Take Better CARE" (TB CARE) project. Under the auspices of this project, 80 children of Prayer Mountain, Antipolo City received treatment for pulmonary tuberculosis. Each group is personally administered the daily dosage by a health worker, who also monitors the progress (x-ray and sputum tests) and other health

Australia

Water Project in Toomelah: The Toomelah Aboriginal Community is located approximately 40 km from Goondiwindi near the Queensland and New South Wales border in Australia. Seventy families are living there, including approximately 100 children, and their facilities are very basic. Their water supply is from a borehole piped to ground storage tanks. This water is then pumped to an overhead tank and then distributed to the community through a network of pipes. It was scientifically and independently demonstrated that the Toomelah water was not up to the standards of the Australia Health Regulations for Drinking Water and it therefore required treatment before drinking. The bore water was contaminated with chemicals (e.g., insecticides and many other chemicals).

The hearts of the Sathya Sai Organisation had gone out to this native community, which was suffering from contaminated water. After liaising with the community, the Sathya Sai Organisation decided to install a water purification system and 1,000-litre storage tank. After extensive organisation and procurement of materials, the 12-hour installation work was carried out on November 4, 2005.

The Sathya Sai Organisation's work also came to the attention of the local press, which carried this story on Sri Sathya Sai Baba's Birthday.