

Peace Through Health

A Mapping of Cooperative Health Programs in Palestine and Israel

A Report of the
Palestine/Israel Health Initiative (PIHI)

by Susan J. Blumenthal, M.D., M.P.A.
and Stephanie Safdi, M.Phil.



A Center for the Study of the Presidency Project on
"Advancing Trust and Reconciliation among Palestinians and Israelis"

For additional information on the CSP Palestine/Israel Health Initiative and the cooperative health programs described in this report as well as to submit descriptions of health projects and resources to be included in future editions of this document and on the PIHI websites, please contact:

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Palestine/Israel Health Initiative Overview

Health is essential to the economy, well-being, national security, and future of the Middle East region. The Palestine/Israel Health Initiative (PIHI) is a central component of the Center for the Study of the Presidency's USAID-supported program "Advancing Trust and Reconciliation in Israel and Palestine."

The Health and Medicine component of this USAID-sponsored initiative focuses on using health as a bridge to further knowledge, cooperation, trust, and understanding between Israelis and Palestinians. Countries cannot achieve political stability or flourish economically with unhealthy people. Health is a common currency in this region of the world to help achieve a better future – reducing inequalities that lead to mistrust and building the relationships between people that can serve as pillars for peaceful coexistence.

Purpose:

- Identify and engage organizations and individuals in joint Palestine/Israel health activities
- Foster dialogue and cooperation and enhance networking between health and medical professionals in Israel and Palestine
- Highlight priority areas where cooperative activities between Palestinian, Israeli, and U.S. professionals can effectively improve health in the region.
- Create sustainability for these efforts

Achievements:

- Identified ongoing health projects in the region and contributed to the development of a cooperative network of Palestinian and Israeli health experts

- Convened working group meetings with Palestinian, Israeli, and U.S. health and medical experts to focus on priority areas for improving health in the region
- Developed a selected inventory of cooperative activities between Palestinians and Israelis in health and medicine in the region
- Produced a report with an analysis of health systems, cooperative health activities and recommendations for improving health in the area
- Created a "Health e-Commons" Internet workspace for sustaining health cooperation and networking between Palestinian and Israeli medical and scientific professionals
- Initiated the development of the first public multilingual Internet portal for health information in this region of the Middle East with resources in Arabic, Hebrew, and English

Next Steps:

Future initiatives include:

- Enhancing cooperation among Israeli, Palestinian, and U.S. health experts and promoting cooperative health initiatives
- Expanding selected inventory of ongoing cooperative activities
- Expanding the content and reach of the health information web portal and increasing utilization of "Health e-Commons"
- Implementing selected recommendations from the PIHI project
- Identifying additional resources for supporting cooperative health projects in the region

Palestine/Israel Health Initiative Introduction

Health is essential to the economy, well-being, national security, and future of the Middle East region. The Palestine/Israel Health Initiative (PIHI) is a central component of the Center for the Study of the Presidency's USAID-supported program "*Advancing Trust and Reconciliation in Israel and Palestine.*" Advancing trust and reconciliation in Israel and Palestine requires the imagination and resolve of local as well as national leaders, and the engagement of non-profit organizations as well as governments. Supported by a grant from the U.S. Agency for International Development (USAID), the non-partisan Center for the Study of the Presidency (CSP), a 40-year-old public policy and education organization, coordinated a series of planning and program activities in Israel and Palestine aimed at fostering reconciliation through local social and economic development and interfaith cooperation. The program consisted of three major components: inter-religious cooperation and dialogue, socio-economic development, and health and medicine programs.

The Health and Medicine component of this USAID-sponsored initiative focused on using health as a bridge to further knowledge exchange, trust, and understanding between Israelis and Palestinians. Countries cannot achieve political stability or flourish economically with unhealthy people. Health is a common currency among nations in this region of the world to help achieve a better future—reducing inequalities that lead to mistrust and building the relationships between people that can serve as pillars for peaceful co-existence.

Just as diplomats have hammered out treaties over the centuries to build bridges between nations, public health officials and humanitarian organizations have begun sharing best practices and technology in an effort to build a new kind of bridge between countries to foster peace and development around the world. This field, health diplomacy, is an important and underutilized instrument in America's foreign-policy toolbox and it has provided a framework for this Palestine/Israel Health Initiative (PIHI).

Health diplomacy recognizes health as a universal and powerful language between people and between na-

tions, which necessitates cooperation even in situations of conflict. Health diplomacy offers a much-needed opportunity for building bridges between societies, creating links between governments, the private sector, and NGOs and allowing them to work together to improve public health. Building such links can facilitate communications in other areas, increasing trust and confidence and helping improve overall relations.¹

In Palestine and Israel, the fields of public health and medicine offer unique opportunities for cooperation between professionals and leaders in both societies who come together to craft common solutions to shared health challenges. Palestinians and Israelis draw their drinking water and feed their fields and livestock from common water sources, including the Jordan River. They breathe the same air. They occupy a similar geographic landscape, eat similar foods from many of the same sources, share certain genetic predispositions, and intermingle on a daily basis as Palestinians cross into Israel to live, work, and seek medical treatment.

Palestinian and Israeli professionals have been working together in the fields of public health and medicine for decades out of necessity and irrespective of political constraints. Though the political climate has affected the feasibility of certain projects, the need for this cooperation has sustained joint Palestinian-Israeli initiatives in health and spurred the development of new programs. This shared work produces relationships that are both professional and personal and that endure despite challenges. These initiatives build trust and reconciliation when patients receive lifesaving treatments, when health systems are built, when diseases and epidemics are monitored and prevented, when cooperation in research is undertaken, and when new generations of professionals are trained. The common quest for good health knows no borders. Crossing politics, borders, and cultures, these cooperative initiatives in public health and medicine are premised on the increasing interdependence of societies and their shared humanity.

The goal of the CSP Palestine/Israel Health Initiative has been to foster cooperation and facilitate interactions between medical, public health, and scientific ex-

perts, as well as other relevant organizations and individuals, in Israel and the Palestinian Territories to improve the health of people in the region as well as to promote increased cooperation and understanding. This Initiative builds on the foundation of health programs that have been conducted over the past decade in the Middle East region facilitated by governmental, academic, and private sector organizations.

The Initiative consisted of meetings of Palestinian, Israeli and American medical experts that produced recommendations to improve primary care, disease prevention, and emergency preparedness as well as to foster cooperation on research, education, training, and the delivery of health services in the region. Other ac-

tivities of the Initiative included a selected mapping of cooperative health programs underway between Palestinian and Israeli scientists and health care professionals and building an Internet-based “health commons” for networking Israeli, Palestinian, and U.S. health and medical experts to foster cooperation and health information exchange. The Initiative also identified innovative opportunities to apply information technology and new media to advance health in the region. Recommendations from the project provide a framework for future work and initiatives. Increased investment in cooperative health activities between Palestinians and Israelis is vital to ensuring a healthier and more prosperous future for people in the region and serves as a pillar for a sustainable peace.

Background on Israeli and Palestinian Health Systems and Health Indicators

Though geographically intertwined, the health systems in Israel and Palestine are worlds apart. Since the passage of the 1995 National Health Insurance Law, the State of Israel has assumed responsibility for providing health services for all of its residents. State funding provides for a standardized set of medical services, including hospitalization. Health care in Palestine was reorganized during roughly the same period, with the creation of the Palestinian Ministry of Health in 1994. By contrast, unlike Israel's standardized provider system, the Palestinian health care system contains a mix of public, non-governmental, United Nations Relief and Works Agency for Palestinian Refugees (UNRWA), and private sector services. While Israel's ratio of physicians to residents is 372.61/100,000, one of the highest in the world², this ratio is only 97/100,000 for the Palestinian Territories.³ Israel and Palestine have at once very different systems of health care delivery and demographic profiles alongside geographic similarities and physical proximity, all operating within the constraints of a complicated and difficult political situation. This complex background has yielded two populations that have divergent health status indicators, many similar disease and genetic concerns, and almost unavoidably intertwined systems of health care delivery.

Israeli Health System

The current organization of Israel's health system has its roots in structures that were institutionalized with the establishment of the State of Israel in 1948. At that time, an Israeli Ministry of Health was formed along with regional health bureaus, an epidemiological service, mother-and-child health care services, and a medical corps to serve the Israeli Defense Force (IDF). Since the establishment of Israel's first and largest insurance company, Kupat Holim Clalit, in 1911, health insurance has been provided by four main insurance companies, known in Israel as "sick funds" or "kupat holim." Other sick funds include Kupat Holim Maccabi, Kupat Holim Meuhedet, and Kupat Holim Leumit. By 1995, approximately 96% of the population was insured. Nevertheless, the financing of health services, which faced periodic budgetary crises, had long been a topic of public debate.⁴

On January 1, 1995, the National Health Insurance Law was passed, creating a mandatory and nationalized

health insurance system for the State of Israel. The law established the state's responsibility for the provision of health services for all of the country's residents. A standardized basket of medical services, including hospitalization, are supplied through the four sick funds. Health costs are funded through health insurance premiums paid for by each resident, employers' health tax payments, National Insurance Institute funds, Ministry of Health funds, and consumer payments. All residents must register with a sick fund, and no sick fund can bar applicants on any grounds, including state of health and age. Among others, health services covered include medical diagnosis and treatment, preventive medicine and health education, hospitalization, surgery, chronic disease treatment, and obstetrics/gynecology.

With advanced medical technology and a thriving information technology sector, Israel provides some of the world's most advanced and accessible medical services. As of 2002, Israel is home to 356 hospitals, including 48 general hospitals with 14,324 beds. The health system also includes approximately 5400 beds for psychiatric patients, 19,600 nursing home beds, and 11,500 private in-patient hospital beds. Approximately 45% of general hospital beds are operated by the government, 30% by Israel's largest sick fund insurance company Kupat Holim Clalit, 6% in two hospitals belonging to the Hadassah Medical Organization, and the rest in hospitals run by non-profit and religious organizations. The ratio of hospital beds to Israeli residents is 5.95/1,000.⁵

The health system also supports over 2,000 community-oriented primary care clinics throughout the country, which are operated by sick funds, the Ministry of Health, and municipalities. Approximately 850 mother and child care centers offer low-cost accessible services throughout the country, including health education programs, regular checkups to monitor child development, and a comprehensive immunization program for newborns and children up to the age of five. 95% of all babies and children in Israel are immunized, a proportion that is higher than in Western Europe and the U.S.⁶ Additionally, Israel's child mortality rate is very low at approximately 4.95 per 1,000 live births.⁷

Israel has four medical schools, two schools of dentistry, one school of pharmacology, 20 nursing schools, and numerous public health programs. Additionally, Israel has approximately 26,000 physicians, most of whom are salaried employees of hospitals and the national sick funds. Israel's physicians service a population of approximately 6,930,000, 81% of whom are Jews and 19% of whom are mostly Arab non-Jews, with the majority of the population residing in urban centers.⁸ Its ratio of physicians to residents is 372.61/100,000, one of the highest in the world.⁹ 8.7% of Israel's gross national product is spent on health, a proportion similar to Western European countries. Israel's health indicators place its population among the healthiest in the world. For instance, life expectancy at birth for men is 77.56 years and for women is 81.74 years. Israel also has an advanced system of secondary care delivery: approximately 25% of its physicians are certified to provide specialized care.¹⁰

Palestinian Health System

In contrast to the high degree of specialization found in Israel, the health care system in the Palestinian Territories is organized principally around the delivery of primary care services. With two medical schools and no centers for training of specialists, the ratio of physicians to residents in the Palestinian Territories is 97/100,000, one of the lowest in the world.¹¹ Transferred to Palestinian control in 1994, the health system's underdeveloped secondary and tertiary health care networks have made it largely dependent on neighboring countries, including Israel, Egypt, and Jordan, for obtaining appropriate health services for its people, particularly for advanced conditions and specialized procedures. While health indicators in the Territories are generally better than for neighboring Arab states, the area faces particular challenges as a result of the political environment and its effects on population mobility, security and stability, the availability of supplies, and the training and accreditation of health care workers.

As of 2004, the Palestinian Territories had a population of approximately 3.6 million people, growing at an annual rate of 2.6% and up from 2.89 million in 1994. The population is divided between the West Bank, East Jerusalem, and the Gaza Strip, with 58% residing in urban areas.¹² According to the Palestinian Central Bureau of Statistics, the average population density in the Palestinian Territory was 625 persons per square kilometer at the end of 2007. The population density in the

West Bank was 415 persons per square kilometer and 3,881 persons per square kilometer in Gaza (one of the highest ratios in the world). By contrast, the population density in Israel in 2007 was approximately 317 persons per square kilometer.¹³ In 1997, the fertility rate in the Palestinian Territories was estimated at 6.1 (2.88 in Israel), and children less than 14 years of age constituted approximately 47% of the total population. In 1997, refugees comprised 65.1% of the population in the Gaza Strip and 26.5% in the West Bank and Jerusalem, and 16% of Palestine's total population was residing in refugee camps.¹⁴

Health status indicators for the Palestinian Territories have generally improved over time and tend to be better than in neighboring countries, *excluding* Israel. Life expectancy, according to 2004 World Health Organization (WHO) estimates, is 72.6 years at birth (71.1 for men and 74.1 for women). Though significantly higher as compared to Israel, the infant mortality rate of approximately 20.5 per 1000 live births is comparable to or lower than rates in neighboring Arab nations and less than half the infant mortality rate in the Palestinian Territories during the 1970s. Furthermore, access to health care as well as living standards and hygiene have improved considerably during the past several decades. The WHO now indicates that 100% of the population has access to sanitation facilities, though only 97% has sustainable access to safe water sources. Moreover, while incidence of infectious disease has declined largely due to immunization programs and other public health measures, incidence and prevalence of cardiovascular diseases, hypertension, diabetes, and cancer has increased, requiring new public health interventions for chronic disease prevention and treatment.¹⁵

Meanwhile, regional politics has affected health status indicators in the Palestinian Territories in recent years. For instance, while childhood immunization coverage rose to approximately 97% by 2001, reports in 2002 indicated that immunization rates had declined, particularly in remote areas. This decrease may in part be due to transportation problems in delivering vaccines across checkpoints, electrical shortages affecting vaccine storage facilities, and constraints on mobility affecting surveillance of vaccine-preventable diseases. Reports have indicated a similar decline in the use of preventive services, particularly among women visiting post-natal care facilities and in the implementation

of school health programs. UNRWA reported a 58% increase in the number of still births from 2001-2002, while the Palestinian Ministry of Health reported that the percentage of home deliveries had increased from 5% to 50%, as a possible consequence of constraints on mobility affecting access to services.¹⁶

In recent years, nutritional status and access to nutritious food, particularly for women and children, have also been issues of concern in the region. Market surveys have suggested shortages of high protein foods, caused in part by a combination of road closures, checkpoints, and military conflict. The collection of waste and other sanitation issues have also grown more problematic since the outbreak of the Second Intifada in 2000, particularly in the Gaza Strip. Additionally, ongoing conflict in the region has produced immediate health effects, causing deaths, physical trauma, and mental health concerns in both Israel and Palestine. In 2004, according to the World Health Organization, injuries (including domestic, road, and conflict-related) represented the leading cause of death for Palestinians 1-59 years of age. In 2004, leading causes of mortality for all age groups included cardiovascular disease (25.1%), accidents (11.4%), cancer (10%), perinatal conditions (8%), and respiratory disorders including pneumonia (6.4%).¹⁷

Palestine's current health system was structured relatively recently with the creation of the Palestinian Authority's Ministry of Health in 1994. Prior to 1967, health services in Gaza were administered by Egypt and services in the West Bank and East Jerusalem by Jordan. Health institutions in Gaza and the West Bank operated independently of each other until 1967, when the Israeli Defense Ministry assumed responsibility for the provision of services in the regions. Nevertheless, Gaza and the West Bank continued to have disjointed health delivery systems, each with a different Chief Medical Officer, administrative structure, and protocols in certain health policy areas. Beginning in 1948, UNRWA has been responsible for providing basic health services to registered Palestinian refugees, who numbered approximately 1.1 million in 1997.¹⁸

Between 1967 and 1994, the Israeli Defense Ministry, with supervision from the Israeli Health Ministry, worked according to a stated objective to provide the best possible health care in the region given the available resources and to maintain financial self-sufficiency

of the government health sector. To do so, it prioritized public health and primary care in the Territories, emphasizing immunization programs and maternal and child health programs in particular. Little investment, however, was available for the development of secondary and tertiary care infrastructure and capacity. As a result, the number of government hospital beds in the West Bank and Gaza increased by only 13% between 1970 and 1993, and in 1992 only 10% (\$5.9 million) of the government health budget for Palestine went into development versus operating expenses.¹⁹

Following the Oslo Agreement in 1993, Israel transferred responsibility for health services and health policy in the West Bank and Gaza to the newly formed Palestinian Authority (PA), managed by its Ministry of Health (MOH). Currently, the Palestinian health system is broadly managed by four sectors: the government sector led by the Ministry of Health, the private sector, the non-governmental (NGO) sector, and the sector run by UNRWA for the health needs of Palestinian refugees. The MOH is the principal regulatory and administrative body for the Palestinian health system, managing public health services and delivery of primary, secondary, and tertiary care in public facilities. Primary care services are still considered to be the backbone of the Palestinian health care system, and 56.5% of all primary health care centers are run by the MOH.

Government-run health clinics are available in all urban centers in the Palestinian Territories but are less common in rural areas. The Ministry of Health does not operate any services in East Jerusalem, where services are provided by Palestinian NGOs and private agencies as well as by the Israeli health system. UNRWA provides education, health care, environmental health and support services to refugees in the West Bank, East Jerusalem and Gaza, who together accounted for 45% of the Palestinian population in 1998. UNRWA also primarily focuses on basic health services, operating 51 primary health care centers in the West Bank and Gaza. 49 NGOs provide health care services to Palestinians, operating 170 primary health care centers and 24 hospitals, primarily in the West Bank. For-profit services are concentrated in urban areas and in the West Bank. As of 2005, there were 77 hospitals with approximately 4,000 beds operating in the Palestinian Territories, 55 of which are located in the West Bank. Of the 77 total hospitals, 43 were general hospitals, 10 are specialized, 20 offer maternity

services and 4 concentrate on rehabilitation. The Ministry of Health operates 22 of these hospitals.²⁰

The accessibility of hospital beds varies considerably between regions. The ratio of beds/ population in the Palestinian Territories was 13.26/10,000 in 2004 (14.87/10,000 in Gaza and 12.32/10,000 in the West Bank). In 2004 in the West Bank, the highest bed accessibility was in Bethlehem, at 37.1 beds/10,000 population, and the lowest was in Salfiet (near Nablus) at 2 beds/10,000 population. In general, tertiary health care services are not evenly distributed. Hospitals tend to be concentrated in urban areas, and more remote populations often have difficulty reaching centers for appropriate care. According to the Palestinian Ministry of Health, most MOH hospitals are over-utilized and crowded while NGO hospitals tend to be underutilized. The MOH estimates the average occupancy rate for MOH hospitals at 80% and the overall occupancy rate for government and non-governmental hospitals at 65%.²¹

With resources predominantly flowing into primary care and community health services, the Palestinian health system faces particular challenges with regards to the provision of secondary and tertiary care services. There are only three oncology and cardiology centers in the West Bank, all located in urban areas inaccessible to most of the population, and specialized medical personnel is limited. As a result, Palestinian patients needing advanced care are often referred to other countries. According to the WHO, approximately 16% of the Palestinian Ministry of Health Budget is devoted to remote care, most of which occurs in Israel, Egypt, and Jordan. In 2004, the total budget of the Ministry of Health was \$126 million, \$32 million of which supported the cost of treatment provided to Palestinians abroad. A recent report by the Israeli Health Minister to the WHO estimated that in 2006 tens of thousands of permits, averaging 200 patients each day, were given to Palestinians to pass through checkpoints and receive medical care in Israel. In 2006, approximately 60,000 Palestinians from the West Bank area were treated in Israeli hospitals, 20,000 of whom were hospitalized and 40,000 of whom received ambulatory services. 2,500 of these patients were children, the majority of whom received long-term treatment for cancer and complicated operations.²²

Financing for health services in the Palestinian Territories is fragmented, coming from a mix of tax revenues, government insurance premiums, out of pocket payments, external assistance, private health insurance, investments, and contributions by the Israeli government and workers living in Israel. In 2004, according to the Palestinian Ministry of Health, 55.9% of Palestinian families were covered by governmental health insurance, which entitles them to free services provided by the governmental health sector. In 2001, total health expenditure per capita in Palestine was \$138, compared to \$1,622 in Israel in 2003. In 2004, health care constituted 13.5% of the Palestinian gross domestic product, as compared to 8.7% of GDP in Israel.²³

Challenges to the Palestinian economy in recent years have impacted financing of the health system. The unemployment rate in Palestine rose to over 60% of the population in 2007, while GDP per capita decreased from U.S. \$1,612 in 1999 to \$1,129 in 2006. According to a 2007 report by the Palestinian Ministry of Health, after the Second Intifada the late President Yasser Arafat decided to offer free health insurance to unemployed persons and their families, which contributed to a decrease in health insurance revenues. Currently, about half of enrolled Palestinian families receive their coverage free of charge. The Ministry of Health has made the sustainable financing of its health system a major objective, identifying as a long-term goal the creation of a national health insurance system that would cover all Palestinians.²⁴

While two medical schools exist for the education of Palestinian physicians, doctors within the Palestinian Territories generally rely on Israeli hospitals to receive specialized training. The Al-Quds Medical School, for instance, began to operate in 1994, offering a 6-year program in medical education based on the European training model. By 1998, the program was graduating 55 students, trained in Gaza, Jerusalem, and Nablus. Palestinian medical students, however, face numerous challenges including difficulties financing their education, access to school facilities, and availability of post-graduate training. The curriculum costs about \$4,000 U.S. per year, which for many students, whose families may be living on \$200 per month, is not financially feasible. Government scholarships and outside donations from Arab states help finance the education for a limited number of students. Al-Quds University's three affiliated medical campuses in Gaza, Nablus, and East

Jerusalem are largely cut-off from each other due to border-crossing issues. In addition, students from the West Bank who must access hospitals in East Jerusalem for their training face daily difficulties obtaining permits and passing through checkpoints.

Resources within the Palestinian health system are limited for students seeking specialized training beyond their generalized medical degree. Palestinian education and training programs face difficulties associated with their accreditation by international standards. Medical students who wish to specialize must complete a residency in a hospital that is accredited by a body that awards a specialty certificate. Only the Makassed Islamic Hospital in East Jerusalem is fully recognized and accredited in four major specialties (internal medicine, general surgery, obstetrics/gynecology, and pediatrics) by the Jordanian Medical Council. Palestinian interns can complete residencies there, which will be certified by the Jordanian medical board. However, Makassed Hospital receives far more candidates than it can train. Consequently, a number of physicians each year receive specialized training in Israeli hospitals such as Hadassah Medical Center and through the support of Israeli NGOs including Save a Child's Heart Foundation and the Peres Center for Peace, among others. In 2006, sixty-five physicians and two nurses participated in a variety of medical and surgical training programs in Israeli hospitals, most of which ran for 3-6 months. Only five physicians, however, participated in a complete residency program of approximately five years to receive a full specialty certificate. Furthermore, the West Bank currently lacks unified programs and standards for continuing medical education, although Al-Quds Medical School has been working to develop infrastructure in this area.

The Palestinian health system faces additional challenges in relation to the training and retention of non-physician health care workers. There is a significant shortage of nurses in the health care system. Nurses also face the same problems with regards to obtaining

specialized training as do Palestinian physicians. In addition, the Palestinian Territories are impacted by the migration of qualified and trained staff from the governmental sector to the private sector outside of Palestine, where they can receive a higher income than what is offered by the Palestinian governmental sector. According to the MOH's 2007 report, the current incentive system is insufficient to build the health care human resource infrastructure needed to improve the performance and effectiveness of the health system.²⁵

Israel-Palestinian Health System Cooperation

Health system disparities between Israel and the Palestinian Territories coupled with their geographic proximity and interdependence have necessitated cooperation in the fields of health and medicine between the two societies. The Israeli Ministry of Health has explicitly followed a "humanitarian policy" with regards to the treatment of Palestinian patients, providing care for hundreds of patients each day in Israeli health facilities and absorbing much of the cost when it is not met by the Palestinian MOH.²⁶ The complicated political environment, however, has made the transfer of patients across checkpoints increasingly difficult. While cooperation also exists in areas like education and training to promote infrastructure development, a systematic approach is needed to develop, supply, and equip a Palestinian health system capable of meeting the needs of its population. The National Strategic Health Plan published by the Palestinian Ministry of Health in December 2007 lays out a vision and roadmap for these changes.

The CSP Palestine/Israel Health Initiative was conceived in an effort to identify, network, and promote cooperative activities between Palestine and Israel in the fields of health and medicine. The Initiative has endeavored to help meet goals articulated for improving health in the region while advancing trust, which is a cornerstone for sustainable peace and cooperation in the future.

History of Cooperation in Health and Medicine Between Israel and Palestine

Since Israel assumed control of the West Bank and Gaza from Jordan and Egypt in the 1967 Six-Day War, professional interactions have occurred on a variety of levels between Palestinian and Israeli health care workers. From 1967 until the onset of the First Intifada in 1987, Palestinians and Israelis developed numerous cooperative health projects. These projects ranged from initiatives focused on specific diseases and populations, such as improving poliomyelitis vaccination rates in the West Bank, Gaza, and Israel, to joint committees on long-term infrastructure planning. During this time, thousands of Palestinian patients were treated in Israeli hospitals, and many Palestinian health professionals were trained in Israel.

The outbreak of violence in 1987 meant that Israeli health officials were no longer able to move freely in the Territories, and as a result, professional cooperation declined. During this time, the Palestinian authorities continued to move forward with organizing their health system, beginning with the creation of a plan for caring for those injured in the violence, followed by the preparation of a national health plan. During this period of conflict and tension, however, cooperation in the health field did not completely cease, particularly with regards to the provision of essential health services. Furthermore, the establishment of the Association of Palestinian-Israeli Physicians for Human Rights (PHR) in 1988 marked what may have been the first initiative of Israeli civil society devoted to providing health assistance to Palestinians outside the scope of the Israeli Civil Administration.

The signing of the Madrid Agreement in 1991 and the Oslo Accords in 1993 resulted in significant advances in the field of health cooperation. A section in Annex 3 of the Declaration of Principles in the Oslo Accords on the importance of civil society cooperation and people-to-people activities provided legitimacy for Palestinian and Israeli NGOs to launch cooperative activities and established a mechanism for international organizations to provide funds and cooperate in their efforts. As a result, several foreign programs such as the United States' Middle East Regional Cooperation Program (MERC) were expanded to include an Israeli-Palestinian component.

The transfer of responsibility for the Palestinian health system to the Palestinian Authority in 1994 and the establishment of the Palestinian Ministry of Health changed the nature of cooperation. Most interaction in the field of health between Israelis and Palestinians revolved around committees established to deal with food, medicine, and hospitalizations, and the Israeli Coordinator to the Palestinian Health Authority assumed responsibility for issuing health-related permits for Israelis and Palestinians to cross the border. In addition to the Palestinian Ministry of Health, the United Nations Refugee Works Administration (UNRWA), the Palestinian Red Crescent Society, local and international NGOs, universities, and the private sector became potential partners for cooperation with Israeli health professionals.

In 2000, JDC-Brookdale, JDC-Israel and Al-Quds University jointly published a study of Israeli-Palestinian cooperation in the health field between 1994-1998. This study identified 148 cooperative projects that took place during these four years and profiled nine of them in its published report. Through surveys of Israeli and Palestinian organizations and interviews with participants, the study mapped cooperative projects and analyzed the factors influencing cooperative initiatives and their mechanisms.²⁷

In the ten years since this study was completed, increased restrictions in mobility and a tenser political environment have made cooperation more challenging. Israeli citizens are now prohibited from entering Gaza and the West Bank, and Palestinians need permits to enter Israel, making it difficult to coordinate people-to-people exchanges. A case study published in 2007 on Arab-Israeli cooperation noted that increased violence from 2001-2004, broader conflicts in the Middle East, and the Hamas takeover of Gaza in 2007 have all contributed to making Israeli-Palestinian cooperation more challenging than ever over the course of the past decade.²⁸ Other recent studies examining Israeli-Palestinian cooperation note these same issues, emphasizing the sensitivities involved and the need to maintain the low profile of many cooperative activities in the current political climate.

With the exception of a few initiatives such as the Middle East Cancer Consortium and the Middle East Consortium on Infectious Disease Surveillance, formal cooperation at the government level has been limited. At the beginning of 2008, four joint committees were operating between the Israeli and Palestinian Ministry of Health on issues such as pharmaceuticals and avian flu. In 2005, Israel's national emergency medical service, Magen David Adom, signed a memorandum of understanding with the Palestinian Red Crescent Society to facilitate cooperation between the two ambulance services. Although this memorandum has been successful in many regards, political issues continue to impact the ability of the two services to fully work together. Although the Israeli Ministry of Health has been explicit in following a "humanitarian policy" with regards to the treatment of Palestinian patients, the complicated political environment has made the transfer of patients across checkpoints increasingly difficult.²⁹

Because of the tense political climate, most health and medicine cooperative activities during the past several years have occurred on a relatively ad-hoc basis between individual professionals, hospitals, and non-governmental organizations. Most of these programs focus on health issues where it is easy to find common ground, such as children's health, cancer, genetics research, or specialist education and training. The Middle East Cancer Consortium (MECC), founded in 1996, for example, has sponsored numerous cooperative projects on cancer and genetics research through its small grants program and has also facilitated education and training. The Israeli-Palestinian Science Organization (IPSO), founded in 2003, received over 100 proposals between 2004 and 2006 for cooperative research between Palestinian and Israeli investigators in the medical and environmental fields. Furthermore, *Bridges Magazine*, founded in 2004 and supported by the World Health Organization, continues to issue bi-monthly publications written and managed by Palestinian and Israeli academics and health professionals. The magazine is intended to embody WHO's paradigm "Health as Bridge for Peace" and endeavors to cover health topics of common concern to both Israel and Palestinian populations while building "relationships, links, and common understanding."³⁰ Moreover, although Israeli physicians are no longer permitted to enter the Palestinian territories, cooperation still occurs

on a daily basis at the physician-patient interface, as Palestinian patients are treated in Israeli hospitals by Israeli physicians.

Several organizations such as Hadassah Medical Organization, the Middle East Cancer Consortium (MECC), and the Canada International Scientific Exchange Program (CISEPO) continue to promote cooperation and facilitate training and patient care exchanges despite violence and political challenges. Such persistence has helped ensure the continuation and strength of cooperative activities. To facilitate cooperation, several recent projects are trilateral in nature, involving participants from the United States, Canada or Europe in addition to Israel and Palestine. These parties play an important role in raising funds, maintaining channels of communication, ensuring the equal stature of parties involved in the work, and facilitating continuation of projects when political tensions rise.

Despite some setbacks in funding and delays that occur due to logistical difficulties, there persists a dedicated group of individuals and organizations committed to continuing their work together on both sides of the border. Although many cooperative projects continue to operate, there is an urgent need for sustained funding to support programs over the long term that will help build and strengthen the entire health care system. Historically, the health sector has benefited from ongoing cooperation between Palestinian and Israeli institutions and individuals, especially in the area of human resource development. Cooperation in the health field is part of a broader spectrum of people-to-people exchanges that operate in the region to build trust and understanding while delivering needed services in spite of a tense political climate. Just as diseases can cross borders easily today, so can solutions, making health an important bridge for building partnerships, trust and cooperation among Palestinians and Israelis.

Using this framework, an objective of the CSP Palestine/Israel Health Initiative was to describe the current scope of cooperative activities in health and medicine, create an inventory of selected initiatives underway, and review lessons learned from these projects with the hope of creating a roadmap for strengthening and developing programs to improve health and promote peace in the region in the future.

Recommendations for Improving Health in Palestine and Israel through Cooperative Activities

The Palestine-Israel Health Initiative (PIHI) focused on key areas in which cooperative activities in health and medicine between Palestinian and Israeli professionals and organizations could be used to systematically advance health in the region. Some of these critical issues included licensing and accreditation of health professionals, facility and human resource development, research and evaluation activities, health information systems and educational campaigns, disease prevention and health promotion initiatives, and emergency preparedness programs.

Despite the current tensions in the region, it was found over the course of this project that considerable support exists among Israelis and Palestinians for continuing and strengthening cooperation to improve health as circumstances permit. Furthermore, health system development might be an area where outside parties, including the United States, can play a constructive role. Several program leaders emphasized during the PIHI Working Group meetings, the important role of a third party, like USAID, WHO, and foundations, in facilitating projects between Palestinian and Israeli health and medical experts. These parties provide support, opening up and maintaining venues for communication, ensure the equal stature of parties involved in the work, and help sustain projects when political tensions rise.

Through meetings and discussions convened during the winter and spring of 2008, the CSP Palestine/Israel Health Initiative identified five areas of critical importance for health and medical cooperative activities between Israel and Palestine. These areas included primary care and prevention, education and training, emergency medicine and disaster preparedness, health information technology, and health and medical research. Following a number of focused discussions between leaders in these areas over the winter and spring, the initiative convened two days of Working Group meetings in East Jerusalem on April 29 and 30th, 2008.

Approximately 50 participants were involved in this two-day exchange convened at the American Colony Hotel in East Jerusalem. Participants included leaders

in health and medicine from Israel and Palestine, representing the Ministries of Health, academia, hospitals, insurance companies, and NGOs. Representatives of international bodies including the World Health Organization (WHO) and USAID also participated in the meetings. Additionally, the sessions featured a group of 12 professionals from the United States, including experts from universities such as Harvard, Brown, and Johns Hopkins and the private sector in the fields of health information technology, emergency medicine, international nursing, medical research, primary and secondary health care, education and training programs, and health website development.

The two-day event included presentations by health professionals from the United States and Palestinian and Israeli experts and leaders of cooperative projects in health and medicine in the region. Participants drew on the discussions that took place at previous meetings of the Palestine/Israel Health Initiative and produced a series of recommendations for each of the Working Group topic areas. The five primary topic areas were consolidated to form three final Working Groups: education, training and research; public health and emergency medicine; and health information technology. Recommendations and findings from these Working Groups were presented at the conclusion of the meetings. A follow-up session was conducted between PIHI's Project Director and Manager and several of the U.S. participants with the Palestinian Minister of Health and staff at the Ministry of Health Office in Ramallah.

Needs articulated by experts and leaders from the Palestinian and Israeli health sectors provided a framework for discussions that took place during PIHI Working Group discussions. The National Strategic Health Plans published by the Palestinian Ministry of Health (1994, 1999, 2001, 2007) articulate a vision of how the health system should develop over time, including short, medium, and long-term objectives. This vision has emphasized public and primary health care as the "cornerstone" of service delivery, with expanded emphasis on health promotion and disease prevention capabilities. The 2007 National Strategic Health Plan emphasized that the health system has

been challenged by the lack of human resources, accredited programs for training and education, distribution of hospital beds, and the availability of specialized personnel.

Discussions emphasized the importance of joint and cooperative projects in health and medicine in the region both in terms of their role in advancing trust and in opening channels for cooperation between Israelis and Palestinians. Detailed recommendations produced from the Working Groups are listed below and cover the following topic areas:

- Education, training and research
- Public health and emergency medicine
- The application of information technology to improve health

It is hoped that the recommendations from these Working Groups and the meetings convened during the course of this project will provide a valuable framework to help inform work on future cooperative projects in health and medicine in the region.

Education, Training, and Research

Background

Along with licensing and certification procedures, Palestinian health professional education programs require strengthening for all types of health providers, including clinicians, pharmacists, health system administrators, public health workers, research and evaluation staff, and other relevant personnel. In many of these fields, the supply of appropriately trained professionals for the health system is currently inadequate. Historically, human resource development has been a domain in which cooperative activities between Palestinian and Israeli professionals and institutions have been very strong. Medical centers and hospitals including Hadassah Medical Center in West Jerusalem and Augusta Victoria Hospital in East Jerusalem as well as NGOs such as Save a Child's Heart and the Peres Center for Peace have been critically important in providing opportunities for Palestinian physicians and nurses to train alongside their Israeli counterparts. The recommendations of this working group highlight the importance of building on existing cooperative programs and creating mechanisms for Israeli and Palestinian professionals and institutions to work together to systematically expand human resources for health.

There are two medical schools in the Palestinian Territories, Al-Quds University at Abu Dies and Al-Najah University in Nablus. Each of these schools admits approximately 50 new undergraduate students per year. While these schools are essential to training future generations of health professionals to meet the needs of the Palestinian population, they face difficulties gaining accreditation by accepted international standards. Basic science and clinical education programs must be strengthened as necessary so that international accreditation can be achieved.

Furthermore, postgraduate medical training for Palestinians is currently very limited. Medical graduates must go abroad for specialty training in nearly every field of specialty, including internal medicine and family practice. The supply of highly qualified physicians is inadequate, particularly in many medical subspecialties. Specific areas of shortage include: psychology, psychiatry (particularly child psychiatry), neurology, oncology (especially radiation oncology and pediatric oncology), cardiovascular surgery, and trauma, among others.

There are also two dental schools in the Palestinian Territories as well as training programs in other health professions, including nursing, pharmacy, midwifery, and medical social work, which were established prior to the medical schools. These programs have helped to meet human resource needs in their respective fields for the Palestinian Territories. However, shortages of qualified professionals still exist in important fields, including dentistry, nursing, midwifery, and psychology.

One major area of need is the establishment and implementation of a human resource development strategy for the health professions to ensure an adequate supply of appropriately trained personnel for the Palestinian health system. The Palestinian National Strategic Health Plan (2007) identifies the development of such a human resource planning and management process as a critical goal. It reports that current training and education programs "do not meet the needs of the health sector" due to: 1) unavailability of an accreditation system of educational institutions and programs based on international standards; 2) shortages in some specialties such as family medicine, psychiatry, and preventive medicine; 3) lack of diversity in public health programs and subspecialties, including epidemi-

ology, reproductive health, nutrition, health information systems, and scientific research; and 4) scarcity of financial and human resources, which are necessary to enable postgraduate studies.

The 2007 Palestinian National Health Plan enumerates several areas of need for human resource development for the health professions. They include: updating, standardizing, and enforcing licensing and accreditation of human resources; accrediting new and existing educational institutions and programs using appropriate international standards; developing continuing education programs and encouraging their utilization; developing an incentive system to motivate qualified health professionals to work in the Palestinian health system; and initiating an ongoing training program for managers in the health sectors. In addition, the human resources planning and management process should be developed by identifying the “exact number, specialty and the place of work for the available health human resources” and assessing the “shortage and the surplus in the various fields to develop a plan to overcome this.”³¹

Recommendations

Recommendations on enhancing education, training, and research in this region through cooperative activities include:

- ***Health Professional Training Exchanges***

Policymakers and local institutions should consider development of cooperative agreements with foreign institutions regarding training and academic exchanges. In terms of meeting medium term goals for human resource development, the Palestinian health system is likely to benefit from the development of bilateral agreements with foreign countries and/or institutions to designate training slots for suitably qualified Palestinian students and to enable periodic exchange of faculty. Training in Israel can be a very cost-effective option for Palestinians, and the exchange itself can contribute to greater understanding between the peoples in the various communities. Ongoing programs are in place in several Israeli health institutions for the training of Palestinian health professionals. These programs are described in some detail in the Selected Inventory of Palestinian-Israeli Cooperative Initiatives in health and medicine. Some Palestinians trained in Israel may be able to live at home, or at least to travel

home frequently and inexpensively. In addition, Palestinians trained in Israel, rather than in other countries, may be more likely to return to Palestine when their training is completed.

- ***Medical Specialist Training Strategy in Palestine***

The need for adequate funding is a constraint for most Palestinian-Israeli training partnerships and a concern for the sustainability of these cooperative efforts. Outside funding would likely be needed to increase the number and duration of postgraduate training opportunities for Palestinians in Israeli institutions. Most training programs are currently conducted for a period of three to six months. The Palestinian health system is in need of fully trained and certified health and medical specialists, including both physicians and nurses. Expanding and funding full residency programs in medical specialties in addition to more short-term training programs can be an important area for sustained and expanded cooperation between Israeli and Palestinian professionals and institutions. Cooperative efforts with Israeli institutions to systematically develop human resource capacity in the Palestinian health system should be based on a thorough understanding of the distribution of health professionals in existing specialties and be tailored to meet the short and long-term needs of the health system. In order to develop such training programs, special agreements regarding the training of Palestinian fellows and residents may need to be signed with specific hospitals in Israel. In addition, the establishment of postgraduate programs at Al-Quds University Medical School could help fill the long-term need for the training and certification of health and medical specialists in Palestine. A specialist training program at Al-Quds could be established in cooperation with Israeli institutions, strengthening ties between Palestinian and Israeli counterparts and helping to gradually build within Palestine an independent and sustainable infrastructure for the full training of an adequate supply of health workers. Funding for these programs might be provided from international sources.

- ***Tailored Postgraduate Training Curriculum and Workshops in Palestine***

One recommended strategy for building more medical specialty capacity in Palestine includes the establishment of a curriculum of postgraduate

training for Palestinian residents and fellows by Al-Quds University Medical School for each medical discipline. The educational training experience could be designed by special committees consisting of qualified Palestinian, Israeli, and U.S. specialists working independently and in cooperation as well as online through Internet classrooms. Additionally, specialists from the United States could participate in the training of Palestinian fellows and residents by visiting the region for short periods to present workshops on specific topics—for example, at the Al-Quds University campus.

- *Technical Assistance*

Israel can provide a source of technical assistance, particularly regarding faculty development and research, to help meet the goal of development of human resources and infrastructure in the Palestinian Territories. Israeli institutions have played this role successfully in the past. Israeli and Palestinian professionals report their willingness to work together in this area. In addition to building ties between health professionals in Palestine and Israel, the goal of these programs should be to build infrastructure in Palestine for the training and independent certification of its own professionals, including residents and fellows across medical specialties.

- *People-to-People Exchanges to Advance Trust and Reconciliation*

Participants in the Working Group involved in cooperative projects in research and training emphasized the important human component of these activities. In addition to helping to meet health systems needs for education and training, there are opportunities to build relationships between Palestinian and Israeli health professionals premised on mutual trust, understanding, and respect. Exchanges and training programs for Palestinian professionals in Israeli institutions tend to produce relationships that last well beyond the conclusion of the training period. In the current political climate where mobility is restricted and opportunities for Israelis and Palestinians to develop personal and professional relationships are limited, these opportunities for relationship-building are both unique and vitally important.

In fact, many of the cooperative programs presented during the Working Group sessions stemmed from relationships that began during training exchanges. Palestinian physicians trained in Israeli institutions have gone back to the Palestinian Territories to begin clinical programs informed by the Israeli ones that they participated in. Israeli and Palestinian physicians and nurses who trained together tend to maintain their contact, both on a personal and professional level. These training programs and exchanges may represent a rare and significant mechanism for building and sustaining relationships of mutual trust and understanding between health leaders in Palestinian and Israeli communities.

- *Cooperative Research Projects*

Working Group participants emphasized the importance of cooperation in health and medical research between Palestinian and Israeli scientists. The Israeli-Palestinian Science Organization and the Middle East Cancer Consortium have been instrumental in facilitating and supporting such partnerships, financially and in other aspects. Cooperative projects in health and medical research take place between academics at universities and other research institutions, and are essential for promoting the exchange of knowledge and expertise, for building research capacity, for the insights they produce, and for the professional and personal channels that they open.

- *Peace Through Health*

Cooperative projects in education, training, and research in health and medicine are vital opportunities for Palestinian and Israeli leaders and professionals in both health systems to learn from each other and work together. Though the political climate makes contact difficult, these relationships seem to endure and grow over time, producing outcomes that are important for knowledge-sharing, research, and the development of health systems in the area, as well as for fostering trust, understanding and friendship.

Public Health and Emergency Medicine

Background

Primary care is the current cornerstone of the Palestinian health care system and will likely continue to be so in the near future. The 2007 Palestinian National Strategic Health Plan underscores its centrality, calling primary health care the “major tool” and the “promoting and improving mechanism to restore and sustain the well-being of the Palestinian people.”³² Certain aspects of primary care in the Palestinian Territories require strengthening, including health promotion and disease prevention, as well as screening and diagnosis, particularly of child developmental disorders and adult chronic and non-communicable diseases.

The relative importance of the primary health care delivery system in the Palestinian Territories has increased with recent political and military conflicts because primary care clinics are widely distributed and thus relatively accessible during periods of restricted mobility. Problems with mobility in the region, have strengthened the role of nurses as well, who tend to live closer to primary care clinics and have been more available to patients than physicians during this time.

Currently, the dynamic of disease and illness is changing in Palestine, with the adoption of a more Western lifestyle and the rising rates of chronic diseases. Health education, health promotion, and early detection programs that address the double burden of infectious and chronic disease as well as the changing Palestinian lifestyle and its associated risk factors (e.g. smoking, obesity, lack of physical activity, etc.) must be built into a public health approach in the region.

Efforts to strengthen health promotion and disease prevention in both Israel and the Palestinian Territories might include additional training and empowerment of health educators, social workers, and skilled lay people such as community health workers. Critical issues to be addressed in the context of public health include sanitation and water quality, workplace safety, diet, nutrition, physical activity, tobacco use, and clinical concerns such as developmental disorders, psychosocial problems, and chronic illness. One important step for the Palestinian national health system in particular is to strengthen psychosocial support and men-

tal health services within the primary care setting. Proactive and community-based strategies utilizing peer groups are generally valuable for addressing psychosocial problems and particularly in the treatment of psychosocial trauma; indeed relatively few trauma victims receive effective care in the absence of community outreach programs.

With regards to emergency response, pre-hospital emergency medical services in the Palestinian Territories are provided by the Palestinian Red Crescent Society (PRCS), which operates with a total yearly budget of \$7 million. Services are provided through a national “101” telephone number, a PRCS headquarters in Ramallah, 8 main stations and 23 substations in the West Bank, 6 main stations and 2 substations in Gaza, and an average of 120 vehicles and 350 EMTs and ambulance drivers on-duty 24 hours a day.³³ Emergency medical services in Israel are provided by the Magen David Adom (MDA), with a 2002-2003 expenditure level of approximately \$114 million³⁴, 1,400 paid employees, and over 10,000 volunteers estimated as of 2006.³⁵ In November 2005, a Memorandum of Understanding (MOU) — an Agreement on Operational Arrangements — was signed between MDA and PRCS to facilitate the entry of both societies into the International Red Cross by June 2006. As of November 2007, the MOU had provided for five PRCS ambulances to operate in East Jerusalem and created a system to screen PRCS ambulances quickly when emergency cases require access to East Jerusalem hospitals. In addition, joint programs have recently begun to ensure that PRCS ambulance drivers and EMTs based in East Jerusalem receive the training required by Israeli regulations. However, other aspects of the agreement, such as the provision to create a formal hotline for the PRCS, have not yet been implemented, and relations between MDA and the PRCS have faced challenges due to tensions in the region.

Recommendations

The CSP Palestine/Israel Health Initiative Working Group discussions stressed the importance of cooperation between Israelis and Palestinians in areas including the provision of emergency medical services and the training and augmentation of primary care and prevention strategies and services. Because disasters like earthquakes and infectious disease pandemics do not recognize political boundaries or regional borders, disaster management and emergency preparedness is

an area that necessitates cooperation between Palestinian and Israeli experts and professionals. With the geographic proximity and daily intermingling of Palestinian and Israeli communities, infectious diseases affecting one population will unavoidably affect the other. Consequently, creating a regional disaster response and emergency preparedness infrastructure may be a topic that can foster cooperative planning between Palestinian and Israeli experts in this field, who will need to work together on these issues of critical common concern to the region. This foundation can be built concurrently with the cooperative emergency medical systems project and the development of patient transfer procedures. These issues can be complementary and might benefit from a coordinated plan for development and implementation.

Cooperative activities and exchange on emergency preparedness are underway between Israeli and Palestinian health systems leaders facilitated through the work of organizations including the World Health Organization (WHO) and the Middle East Consortium on Infectious Disease Surveillance (MECIDS). Presentations by regional leaders of organizations including MECIDS at the Working Group Meetings emphasized the necessity of these cooperative partnerships for disaster preparedness and planning for the region. Exchanges have occurred in the past in response to events like the SARS outbreak and in preparing for a potential pandemic with avian influenza. During 2007, public health experts from the Palestinian Authority, Israel, and Jordan met on several occasions, convened by the NGO Search for Common Ground, to address the threat of avian influenza, which emerged in poultry in the Gaza Strip and Israel, and began joint preparations for a possible pandemic.

Recommendations on Public Health and Emergency Medicine for this region include the following:

- **Health Education and Health Promotion Programs**
The Palestinian lifestyle is changing and with the adoption of a more Western lifestyle, chronic disease is on the rise in the Palestinian Territories. Consequently, health education and health promotion programs must be built into the Palestinian public health system to directly address the double burden of chronic and infectious disease. One recommendation for such a program would be the establishment of a three month health promotion course for

Palestinian nurses and social workers to provide them with the theoretical and practical tools for future development of health promotion programs in their communities. Such a course could be led in Arabic and English by Israeli health experts or jointly by Palestinian and Israeli health professionals. In its next stage, graduates of this course would develop local health education training programs for local peer instructors. Furthermore, the development of a school health curriculum, particularly for grades 1-6, is critical to the prevention of infectious and chronic diseases. Models for such programs have been developed (including by the Health Promotion Unit team at Ben Gurion University Faculty of Health Sciences) and could be shared, implemented, and brought to scale.

- **Disease Prevention: Smoking Prevention, Stress Management, and Screening Programs**
Disease prevention, including early detection and mental health programming, should be a cornerstone of a public health approach. An important educational challenge for the Palestinian Territories will be the development of a course for the prevention and cessation of smoking for physicians and nurses, as the smoking rate in Palestine is very high (above 50%) for men and increasing among women. Furthermore, mental health problems are a concern in Palestine and Israel due in part to the presence of conflict in the region. Stress management programming is needed for Palestinian communities but is currently lacking. Interventions for stress reduction may be taught by physicians, nurses, peer instructors, social workers, and psychologists. Furthermore, early detection of behavioral and physical risk factors (including through population-wide screening programs) for cardiovascular disease and cancer is needed for the entire population and particularly to detect diabetes.
- **Establish Emergency Medicine Infrastructure in Palestine**
The most effective way to begin planning for disasters is to establish and maintain a strong public health system and medical infrastructure. To achieve this goal, it was suggested that the possibility be explored of forming a paramedic “train-the-trainer” program based in Jerusalem for Palestinian personnel. This program would last 3-5 months and cover an advanced emergency medical technician

curriculum. The graduates could continue on-the-job training in the Palestinian Territories and obtain the skills needed to train additional Palestinian health care workers in these areas. Reducing the program time from the 6-12 months typically allotted for paramedic training and concentrating on high impact practical topics in this condensed curriculum would make the program more viable as well as reduce costs without significantly compromising didactic content. On-the-job training might reduce some ride-along requirements, which extend the time required in typical paramedic programs.

- ***Use of Medical Simulation for Training Purposes***
Working Group participants discussed the possibility of using high fidelity medical simulation to conduct joint educational exercises. Medical simulation is an effective tool for training health care personnel in the recognition and treatment of disease processes, teamwork, responding to emergencies, and practicing procedures to help reduce errors. The resources available in Israel, at the Hadassah Medical Center and elsewhere, could be leveraged to create cooperative training programs involving experts from Israel, Palestine, and the United States. These programs could place emphasis on responses to shared threats such as earthquakes and the pandemic influenza as well as play a role in the education and ongoing training of paramedics.
- ***Standardized Electronic Emergency Health Records and Protocols***
Development of standardized protocols for the delivery of care, particularly in the area of pre-hospital care, was also recommended as a potential cooperative initiative. Maintaining consistency in patient care in the pre-hospital setting will improve quality, as the continuum of care transcends political boundaries between Palestine and Israel. Patients are often transferred between facilities and between PRCS and MDA ambulances, and joint protocols would help ensure continuity of care. These protocols could be strengthened by formulating standard agreements and memoranda of understanding for mutual aid and surge capacity between institutions in the region.

The initial effort towards unified standardized protocols could also involve the development of a joint coordination center to facilitate inter-facility and

scene transfer of patients from the Palestinian Territories. This center could utilize a simple electronic information transfer protocol to help with patient tracking and to reduce the logistical difficulties and delays experienced during emergency patient transfers into Israel. A unified coordinating body stationed in a single dispatch center with representation from Israel and Palestine could act as a clearinghouse for all transfer requests. It could facilitate institutional transfers by maintaining open lines of communication with officials granting permits as well as the hospitals and checkpoint personnel. Furthermore, to facilitate the transfer of information between hospitals, emergency medical services, and health ministry officials, a simple Internet-based electronic patient transfer information form accessible to all parties simultaneously could be developed and maintained under the current EMS structure. Expanding patient transfer procedures to include real-time Internet-based hospital bed capacity monitoring would expedite patient transport and transfer during times of disaster and surge as well. To this effect, a low-technology web-based solution was developed and is currently being used effectively in the state of Rhode Island in the United States. This or a similar system could be used in Palestine and Israel, as the geographic size and number of hospitals is similar to Rhode Island's.

- ***Emergency Medicine Teleconsultations***
The formation of an emergency medicine tele-consultation program was recommended, which would be run on a cooperative basis by Israeli, Palestinian, and U.S. experts in health, medicine, and information technology. Such a system could be helpful in emergency cases when expertise is not available locally and provide expertise that may not be immediately available as a result of restrictions on the mobility of health professionals in the Palestinian Territories. These systems could be used to triage patient transfers and offer interim recommendations to health care providers for patients awaiting tertiary care. This system could utilize low-bandwidth technology or more complex solutions. Email-based histories and physical examinations of patients augmented by photography sent over the Internet would be one possible systems approach. A real-time web-conference system with connections between hospitals would be another. There appears, however, to be little buy-

in at this time to these types of programs because direct interaction and examination of the patient is valued highly and there is minimal use of health IT currently. In this region, it is important to demonstrate that Internet technologies and new media can and should be incorporated into cooperative activities in such a way that they support and facilitate rather than supplant person-to-person interactions and exchanges.

- ***Disaster Medicine Fellowship Program***

The establishment of an international fellowship program in disaster medicine was recommended as an important area for cooperation in developing expertise and exchanges in emergency and disaster medicine in the region. This program could have several components including an on-line didactic curriculum, an on-site program at a designated hospital, and a simulation-based training component. Programs that are longitudinal in nature involving the cooperation of Palestinian and Israeli health care professionals are essential to building long lasting and durable relationships. Many examples exist of cooperative research projects and educational and training programs involving Palestinian, Israeli and U.S. health care professionals. Existing programs should be continued and expanded and new opportunities created where possible. International fellowship programs should include post-graduate medical students from Palestine, Israel and other countries in the region. These programs could be supported by local experts as well as those from the United States.

- ***Establish Specialty Treatment Centers in Palestine***

As the impact of infectious disease on the health of Palestinians has declined, the relative importance of non-communicable and chronic illness has risen. As in most countries, ischemic heart disease, stroke, hypertension, diabetes, and cancer together account

for more than half of adult mortality, and incidence and prevalence rates for these conditions have been rising over time. Accordingly, among the top priorities in Palestine are the establishment of a central cardiac center (including interventional cardiology and cardiac surgery) and a cancer center equipped with all the necessary equipment to provide comprehensive oncological treatment (radiotherapy, medical oncology, pediatric oncology, and psychological and family support services).

- ***Establish a Palestinian Trauma Center***

Among infants and children in the Palestinian Territories, one-third of deaths are due to injuries, more than any other identifiable category of causes. Accordingly, a centralized trauma center is urgently needed which would include the following surgical disciplines: general, orthopedic, chest, pediatric, neuro, ophthalmic, maxillo-facial, and ENT, along with the necessary imaging systems: CT, MRI and others. Expertise in Israel in the area of trauma medicine is quite advanced. Hadassah Medical Center in particular has developed an integrated trauma center which serves as an international model. Israeli experts from this and other institutions appear very willing to engage with and share expertise with their Palestinian colleagues to help develop a trauma center in the Palestinian Territories. The development of a trauma center as well as cancer and cardiac centers for the Palestinian Territories represent potentially feasible and important cooperative initiatives between Palestinian and Israeli as well as U.S. professionals and institutions. However, the establishment of comprehensive centers in cardiology, oncology, or trauma ultimately relies on a strong public health and primary care foundation. When contemplating the formation of these centers, links to public health, EMS, primary care providers, and educational centers must be considered and be available.

Health Information Technology

Background

Health information and data collection are the scaffolding for advancing health care in societies across the world. “Health Information” is a broad concept which includes all types of data that are directly relevant to health system planning, operations, and evaluation. Such data include both vital statistics and epidemiological data (vaccine coverage, nutritional status, measurement of behavioral risk factors, disease incidence and death rates, cost of health care, use of pharmaceuticals, health insurance registry, purchasing of health services, etc.). In the 21st century, health information technology also includes the tools of new media that function as conduits for transporting data, including the Internet, cell phones, PDAs, and telemedicine systems.

The Palestinian Ministry of Health has identified the strengthening of its health information management system as a strategic goal. The 2007 Palestinian National Strategic Health Plan indicates that “in spite of efforts made by MOH and several partners to strengthen health information management there is still much room for improvement.”³⁶ In the Palestinian Territories, the Palestinian Health Information Center at the Ministry of Health collects data on health status indicators and services while the Palestinian Bureau of Statistics provides for vital statistics. Quality of data collection in Palestine as well as data analysis capacity require strengthening. The absence of comprehensive health data in the Palestinian Territories impedes national planning efforts, policy development, research, and evaluation. In addition to the Ministry of Health’s efforts, data tends to be gathered in a fragmented way, by NGOs, international agencies, and providers, all of which use this information for their own monitoring and programmatic purposes, resulting in a flow of information which can be contradictory and lacking in cohesion.

The Palestinian Territories need to improve data collection on the incidence and prevalence of non-communicable diseases and behavioral risk factors. Data on conditions such as heart disease, diabetes, hypertension, and cancer are incomplete. The 2007 Palestinian National Health Plan also reports that “the health sector urgently needs to identify basic health indicators (base-line indicators) and the development of an information system capable of collecting and analyz-

ing data and trends for these indicators and produce periodic reports routinely and timely.”³⁷ Furthermore, the Palestinian health system is also likely to benefit from a surveillance system of behavioral risk factors, including tobacco use, diet, and physical activity, which would help in targeting and implementing interventions to specific population groups. The World Bank is currently sponsoring a major project with the Palestinian Ministry of Health to strengthen various health information systems, including national registries for health insurance and international referrals. Ongoing population-based nutritional monitoring is being conducted or supported by various organizations, including Al-Quds University, Johns Hopkins University, CARE, USAID, the United Nations Children’s Fund, and others.

In Israel, the Health Information Department in the Ministry of Health serves as the focal point for health statistics and data collection. Additionally, individual hospitals and universities are involved in data collection and research. The use of electronic medical records (EMRs) is widespread in Israel. A 1999 survey by the Israeli Medical Association revealed that of the 26 general hospitals in Israel, 21 (91.3%) use EMR systems.³⁸ However, this same survey also showed that there are 27 different types of EMR systems in use in Israeli hospitals, and generally more than one type is used in any given hospital. An ongoing Interoperable Health Information Infrastructure (IHII) project has the goal of developing state-of-the-art technologies that promote interoperability of EMRs.

Furthermore, health information technology today also includes the tools of new media, which are reshaping the way that individuals and societies communicate and share information. The Internet, email, cell phones, PDAs, iPods, satellite television, and other rapidly spreading technological devices are only beginning to be explored as methods for advancing public health and medicine. Cell phones, for instance, owned by most Palestinians and Israelis, can help with data collection and public health outreach. Functioning as miniature hand-held computers, cell phones and PDAs have created an unprecedented level of connectivity, which can be harnessed for public health purposes and in support of cooperative activities in this and other regions of the world. These devices may soon take their place next to the stethoscope as essential instruments in health professional toolboxes as well as for consumer empower-

ment. The Internet too can be used in new and creative ways to promote cooperative activities that advance health and medicine. Telemedicine systems, remote monitoring for conditions like hypertension and diabetes, online networking websites, and health information portals all represent powerful ways of connecting professionals and the public with critical information and with each other. In this region in particular, new media tools can help to transcend geopolitical divides which can make communication and cooperation difficult. Online workspaces immunized from politics can facilitate cooperation between Palestinians and Israelis for the advancement of health in the region as well as to promote trust and reconciliation.

Recommendations

Recommendations on applying health information technology to advance health in the region include:

- ***Create Compatible and Comprehensive Systems for Health Information Sharing***

Regional and international systems for data exchange require strengthening. Given the relative strengths of Israel's health information systems and its technology sector, the development and extension of health information systems in the Palestinian Territories is an area where cooperation and the sharing of expertise would be particularly beneficial. Cooperation in the area of health information systems development could help meet goals laid out by the Palestinian Ministry of Health. At the same time, the development of compatible health information technology systems would be of considerable benefit to both Israel and Palestine by facilitating data exchange and the monitoring and treatment of patients and risk factors. Health in Palestine is closely bound to health in Israel as well as Egypt, Jordan, and other countries in the region. As a result, these countries are likely to benefit from the development of ways to rapidly and accurately exchange epidemiological data and information.

- ***Establish an Electronic Medical Record***

There is a need in both Israel and Palestine for widespread adoption of an interoperable electronic medical record to collect and analyze shared data for research and evaluation. This is vital for monitoring and combating public health issues of

common concern. A web-based program has been developed as a component of the Middle East Consortium on Infectious Diseases to assist Israel, the Palestinian Authority, and Jordan to combat food-borne diseases and avian flu. This system permits public health researchers and organizations to rapidly report, share, and act on medical and health information across borders. These three societies share a common waterway, the Jordan River, and their citizens breathe the same air and cross borders on a daily basis. All of these factors make the tracking of infectious diseases including food-borne illnesses essential to the well-being of everyone in the region. In addition to the monitoring and evaluation of disease and risk factor trends, improved health information systems would greatly benefit other areas of health and medical research that are important for Palestinian and Israeli scientific cooperation, such as genetics research.

- ***Utilize online Health e-Commons and Listservs for Medical Specialty Networking***

Online tools and websites can serve as important vehicles for networking and information-sharing in the region to aid in health promotion and health systems development. The Palestine/Israel Health Initiative has explored the use of online media for facilitating networking and cooperative activities between Palestinian and Israeli health and medical experts. Through the pilot PIHI "Health e-Commons" website run in conjunction with Working Group Meetings, the Initiative determined that these networks and web spaces can be a useful and cost-effective mechanism in the region for connecting health professionals in meaningful ways and sustaining their relationships and information-sharing between and beyond face-to-face meetings.

One strategy to enhance networking among medical specialties would be the development of Palestinian and Israeli Internet listserv groups for specialties, such as Pediatrics, Emergency Medicine, and Radiology, or use of the PIHI "Health e-Commons" for this purpose. This online strategy facilitates communication, cooperation, information-sharing, and relationship-building among Palestinian and Israeli health specialists.

- ***Develop an Online Patient Transfer System***

The development of an online system could help to manage the transfer of patients between health facilities in Palestine and Israel. Currently, patient transfers are often accomplished by fax, particularly when the transfer occurs from a Palestinian to an Israeli hospital. A comprehensive electronic system for exchange and storage of patient information is a necessary step in the development of compatible health information systems in the Palestinian Authority and Israel, and the Internet should be harnessed to accomplish this goal.

- ***Create an Inventory of Health Information Technology***

A first step in a concerted strategy to develop compatible information technology systems would be a joint Palestinian-Israeli Information Technology inventory and research project to detail existing health IT in the region and create an analysis of gaps and costs to inform future development work. Additionally, a Palestinian-Israeli research team could select a single disease or condition of mutual concern, such as breast cancer, around which a health care provider organization in Israel and an organization in Palestine could jointly pilot electronic medical record implementation. Small steps such as these would both facilitate joint work between Palestinian and Israeli researchers and health and medical experts and lay the groundwork for systematic and compatible health information system development in the future.

- ***Explore New Media and Information Tools to Improve Health in the Region***

New media and information tools include telemedicine and tele-health, which allows professionals to share information and expertise and practice medicine together across borders. Teleconferencing and Internet-based networking tools can help facilitate interaction, exchange, and virtual meetings between Palestinian and Israel public health and medical experts when they cannot consistently meet in person. In addition, mobile phones are a largely unexplored resource for public health purposes, which might be particularly useful in this region for public health outreach as well as data collection and data sharing. The use of the Internet and new media devices like cell phones, satellite TVs, iPods, and PDAs are rapidly proliferating, and their potential should be crit-

ically examined now for their applications to support cooperative activities between Palestinians and Israelis to advance health in the region.

- ***Establish a Health e-Commons***

As a first step, the Palestine/Israel Health Initiative launched an online networking “Health e-Commons” workspace, “PIHI Project Spaces.” The technology and the domain-name (<http://www.pihi.projectsaces.com>) were donated by an online strategy consulting firm. This workspace provides a password-protected forum for Working Group participants and other individuals interested in cooperative health work. It allows them to convene online in an electronic commons to share best practices, health information, and data through the Internet. The space fosters the sharing of information and the discussion and development of cooperative health activities in the region. In this “Health e-Commons,” users post announcements and resources, view documents related to meeting topics and health programs in the region, and originate and contribute to discussions pertaining to the Working Group topic areas. Links are also provided to open-university public health courses, health tutorials, online medical brochures and a range of other useful materials, which is evolving and growing with the contributions of the participants. Palestinian, Israeli, and U.S. participants in the Initiative’s Working Group meetings are currently using the site to share insights and maintain connections facilitated by the Working Group sessions. It is hoped that activity on this site will continue and grow and that it can be a model for the development of future online networking tools used by Palestinian and Israeli health and medical experts for the advancement of cooperative projects in health and medicine in the region. The “Health e-Commons” is building an online community of Palestinians and Israeli health care providers, researchers, and policymakers, with tools that facilitate active networking and the sharing of information and experiences within this online forum.

- ***Establish a Middle East Health Information Website***

The Palestine/Israel Health Initiative has begun developing one of the first public health information portals for sharing of health information and clinical guidelines in the region, with resources in He-

brew, Arabic, and English. This public website (www.HealthMiddleEast.org) is geared toward a general audience of health professionals and consumers in the Palestinian Territories and Israel. It will include and link to a wealth of information on diseases and medical conditions of common concern in the region and provide helpful resources to prevent disease as well.

This expansion of the resources available in the “Health e-Commons” through a public portal will extend their reach to Palestinian and Israeli profes-

sional and public audiences. The portal will also include a section that links to descriptions of cooperative programs and activities in health and medicine between Palestinians and Israelis, helping to facilitate the growth of these Initiatives and build support for this work. Furthermore, a website of this kind can provide information for outside parties, such as interested organizations in the United States and other countries, on health systems in the region and link collaborators from other areas of the world to experts and joint activities in Palestine and Israel.

Selected Inventory of Palestine/Israel Cooperative Health Initiatives

Background

In recent years, few studies have been conducted to identify ongoing partnerships and cooperative health programs underway between Israelis and Palestinians. The most recent selected mapping of cooperative initiatives was published by the JDC-Brookdale Institute in 2000 and included information on Israeli-Palestinian cooperation in the health field from 1994-1998.³⁹ Much has changed since the conclusion of this study period, including the Second Intifada, changes in government leadership, the emergence of new diseases and public health threats, and innovations in the fields of public health and medicine. Many of the programs profiled in this prior report no longer exist and some new initiatives have been created over the past decade.

The lack of knowledge regarding the landscape for ongoing cooperative initiatives between Palestinians and Israelis impedes investment in these activities and networking between those involved. As a first step to overcoming this knowledge gap, the Palestine/Israel Health Initiative (PIHI) has created a selected mapping of cooperative health programs underway between Palestinian and Israeli scientists and health care professionals. The PIHI Selected Inventory identifies cooperative programs conducted from 2005 to the present between Israel and the Palestinian Territories as well as highlights many organizations that have been deeply involved in cooperative activities over the past several years.

Because of the sensitive nature of these projects or due to lack of funding and publicity, many of these initiatives are not widely known. The majority of these cooperative projects and organizations were identified through structured Internet-based research and field investigations carried out over the course of the CSP Palestine/Israel Health Initiative. The Selected Inventory contains information on over forty cooperative programs in health and medicine between Palestinian and Israeli professionals, including a description of the program's mission and goals, its partnering organizations, and contact information.

Methodology

After identifying key individuals and organizations involved in cooperative projects through structured Internet research and personal communications, the websites of these organizations were examined for joint projects that had been conducted since 2005. A cooperative health project was defined as an activity centered around improving health service delivery, health education and training, and/or research that involved at least one Palestinian and one Israeli health professional or organization. After examining the websites of these organizations, a search was done through Google Web and Google Scholar for news about these organizations and their cooperative health projects. Search terms included the name of the organization, the name of the organization's leader, as well as the name of the organization and/or the organization's leader combined with the search terms below.

To identify cooperative projects for this inventory, both Google Web and Google Scholar searches were performed. The following search terms were used in both search engines:

"Palestinian Israeli Health Cooperation"

"Palestinian Israeli Collaboration"

"Joint Palestinian Israeli Health Projects"

"Middle East Health Cooperation"

"Middle East Health Projects"

"Israel, West Bank, Gaza Health Projects"

"Israel, West Bank, Gaza Health Cooperation"

As individual projects were identified, the names of those projects were searched for additional information, both individually and in conjunction with the search terms above, on both Google Web and Google Scholar for additional information. Key individuals from the identified projects and organizations were also searched on Google Web and Google Scholar.

To advance understanding of these activities and further identify additional joint health projects, participants in the PIHI Working Group meetings were asked to describe cooperative initiatives that they have participated in or are aware of. Through this method, sev-

eral additional projects and their key contacts for these initiatives were identified for more information about their programs.

Disclaimer

Descriptions of the projects and organizations included in this Selected Inventory were obtained either from documents published on the Internet or directly from participating individuals. All people noted in this inventory who are involved in these projects were informed of the intent to publish information about these cooperative programs in this Selected Inventory.

NOTE: Several cooperative initiatives listed are umbrella organizations for many smaller projects. For example, the Middle East Cancer Consortium and the Israeli-Palestinian Science Organization help to coordinate and oversee many cooperative programs each year between Israeli and Palestinian scientists and health care providers. However, due to the lack of detailed information about some of these projects and their sensitive nature, the smaller programs under each of these organizations were not described independently.

Additionally, this inventory is not a comprehensive mapping of all activities but rather highlights selected programs as models for cooperative work on health and medicine in the region. Such a selected mapping can serve as a useful tool for experts and health professionals as well as a guide to promising programs for donors and for governmental and nongovernmental organizations.

Contact Information

For additional information on these cooperative programs and to submit descriptions of health projects to be included in future editions of this selected inventory, please contact:

– HealthPIHI@gmail.com

Selected Inventory of Cooperative Projects

Bedouin Genetic Research Project

Mission and Goals: Dr. Ohad Birk (an Israeli geneticist), Dr. Izzeldin Abuelaish (a Palestinian physician from Gaza), and Dr. Khalil Elbedour (a Bedouin-Israeli physician) are working together at Ben Gurion University to identify the mutant genes that cause genetic dis-

eases prevalent in the Bedouin community linked in large part to intermarriage among relatives. In addition to working with the Bedouin population in Israel, Dr. Abuelaish, a physician from Gaza, is collecting data and constructing family trees from his patients in Gaza. The researchers are providing confidential and discreet genetic testing to interested families and are working closely with Muslim leaders to spread messages about the benefits of genetic testing. From 2004-2006, the team identified eight mutant genes not previously associated with a disease and dozens of new mutations in other genes previously linked to with genetic disorders. The lab work is sponsored by Israeli philanthropist Morris Kahn.

Project Partners: Ben Gurion University, Israel

Information: <http://www.nytimes.com/2006/03/21/science/21bedo.html>

Key Contacts:

- Ohad Birk, MD, PhD - Acting Director, Genetics Institute, Soroka Medical Center, Ben Gurion University; Group Leader, Human Molecular Genetics Lab, Ben-Gurion University.
email: obirk@bgu.ac.il
- Izzedlin Abuelaish, MD – Genetics Institute, Soroka Medical Center, Ben Gurion University; OB/GYN, Jabalya refugee camp, Gaza strip.
email: izz_aish@yahoo.com

Brandeis University/Al-Quds University Partnership

Mission and Goals: The goals of this administrative and academic partnership between Brandeis and Al-Quds Universities include strengthening the Al-Quds University infrastructure, providing educational opportunities for students and faculty, and fostering cultural understanding. The Brandeis University / Al-Quds University partnership grew out of a 1997 visit to Brandeis by Al-Quds President, Dr. Sari Nusseibeh. The initial phase of the partnership, which ran through June 2007, focused on administrative and academic exchanges. For example, during this initial phase, the Vice President for Administrative and Financial Affairs at Al-Quds University spent two years at Brandeis University developing a strategic plan for Al-Quds. During this period, four master's degree students from the American Studies Program at Al-Quds University spent two weeks at Brandeis University. The second phase of the partnership runs through December 2009

and is focusing on teaching and academic exchanges, including health programs. A description of the program and participant list can be found at <http://www.brandeis.edu/aqu/en/bios.html>.

Project Partners: Brandeis University, Waltham, Mass, USA; Al-Quds University, East Jerusalem

Website: <http://www.brandeis.edu/aqu/en/about.html>

Key Contacts:

- Dr. Daniel Terris - Associate Vice President for Global Affairs; Director, International Center for Ethics, Justice and Public Life at Brandeis University. email: terris@brandeis.edu
- Dr. Khuloud Khayyat Dajani, Professor of Social Medicine and Health Policy, Al-Quds University. email: khuloud@planet.edu

Bridges Magazine

Mission and Goals: *Bridges*, the first Israeli-Palestinian Public Health magazine, was first published in December 2004. Its overall aim is to promote greater dialogue and understanding between the Palestinian and Israeli public health communities. It also aims to be informative, educational and entertaining. Eighteen issues have been published to date and 3,400 copies of each issue have been printed and distributed to over 3,000 addressees in Palestine, Israel, and other countries. The Editorial Board of *Bridges*, chaired by WHO and comprised of Israeli and Palestinian health professionals, is responsible for producing the magazine. The Board has also promoted various workshops and meetings between the two health communities to discuss common health issues. The last workshop was held in December 2007 on "Access to Health in the Gaza Strip".

Project Partners: World Health Organization, Palestinian and Israeli health professionals

Website: <http://www.bridgesmagazine.org/>

Key Contact:

- Tony Laurance - Head of Office, World Health Organization, West Bank and Gaza. email: info@who-health.org

Cancer Genetics Course for Palestinian Genetic Counselors

Mission and Goals: In January 2008, six Palestinian women participated in a Breast Cancer Research Foun-

ation-funded course on breast cancer genetics and genetic counseling. These women are now completing their in-service genetic counseling training at Augusta Victoria Hospital in East Jerusalem and Shaare Zedek Medical Center in Israel. The training focuses on providing breast cancer genetic testing and counseling to Palestinian women for the first time in history. Mentoring these women is a team of Palestinians, Israelis, and Americans, including Dr. Ephrat Levy-Lahad from Share Zedek Medical Center in Jerusalem, Dr. Moien Kanaan from Bethlehem University, Dr. Samir Khatib from Bethlehem University, and Dr. Mary-Claire King from the University of Washington. This team will also begin genetic analysis of breast cancer in Arab women living in the Palestinian Authority and Israel. The group plans to apply the knowledge gained in studies of Ashkenazi Jewish families to understanding the genetics of breast cancer in Arab women, and to offer the first systematic care and follow-up program for women with inherited breast cancer risk in the region. The program is underway at Share Zedek Medical Center in Jerusalem and Augusta Victoria Hospitals, in cooperation with Bethlehem University. The genetic testing and counseling program is a first step in raising public awareness about the disease, promoting early detection, and in these ways enhancing the possibility of positive health outcomes for Arab women who have breast cancer.

Project Partners: Breast Cancer Research Foundation, United States; Share Zedek Medical Center, Israel; Bethlehem University, West Bank; Augusta Victoria Hospital, East Jerusalem; University of Washington School of Medicine, United States

Website: http://www.bcrfcure.org/action/arab_women.html

Key Contact:

- Moien Kanaan, PhD - Dean of Science and Hereditary Research Lab Director, Bethlehem University. email: mkanaan@bethlehem.edu

Cerebral Palsy Collaboration

Mission and Goals: This initiative is investigating different approaches to improving motor function in Palestinian, Israeli, and Jordanian children with cerebral palsy through work at three clinical sites in Jordan, Israel and East Jerusalem. The objectives of the project are to both increase cooperation among health care professionals in Jordan, Israel, and Palestine and to disseminate and standardize a new cerebral palsy therapy. The program provides a consistent and evi-

dence-based system of clinical care, establishes a small, cohesive consortium of clinical researchers, and fosters interdisciplinary communication in the region. The project was launched in February 2006 with an opening conference held in Aqaba, Jordan, under the auspices and with the participation of Princess Magda Raad, chairperson of the Al-Hussein Society in Jordan. This project is sponsored by a grant from the Middle East Regional Cooperation Program (MERC) and coordinated by researchers at Ben Gurion University.

Project Partners: United Cerebral Palsy Research and Educational Foundation, United States; Ben Gurion University, Israel; Al-Hussein Society Rehabilitation Center, Amman, Jordan; Basma Rehabilitation Center, East Jerusalem; Child Development and Rehabilitation Center at Assaf Harofeh Medical Centre, Israel

Website: <http://www.ucpresearch.org/newsandevents/111207-middleeast.php>

Key Contact:

- Professor Jacob Kaplanski – Associate Professor Emeritus, Ben Gurion University Faculty of Health Sciences. email: jacobk@bgu.ac.il

Child Nutrition in Israel and Palestine Conference: Fostering Joint Initiatives

Mission and Goals: A conference was convened in February 2005 by the Friedman School of Nutrition and Science Policy, Tufts University, Al-Quds University, and Ben Gurion University, in association with the Environmental Protection and Research Institute in Gaza. The purpose of the meeting was to address the current challenges of food insecurity and inadequate nutrition for children in some parts of Palestine and Israel.

Project Partners: Tufts University, United States; Al-Quds University, East Jerusalem; Ben Gurion University, Israel

Website: http://nutcent.bgu.ac.il/Final_Program%20Jan_29th-1.htm

Key Contacts:

- Drora Fraser, Ph.D – Professor of Epidemiology and Health Sciences Evaluation, Ben Gurion University. email: fdroira@bgumail.bgu.ac.il
- Irwin Rosenberg, MD – Friedman School of Nutrition Science and Policy, Tufts University. email: irwin.rosenberg@tufts.edu
- Dr. Mohamed Shaheen - Dean, School of Public Health, Al-Quds University. email: cdphc@palnet.com

Child Rehabilitation Initiative for Safety and Hope (CHERISH)

Mission and Goals: CHERISH is a partnership between the Israel Center for Treatment of Psychological Trauma at Herzog Hospital in Israel, the Center for Development in Primary Health Care at Al Quds University, and the JDC-Middle East Program. This multidisciplinary project focuses on psychological and social rehabilitation of Israeli and Palestinian children exposed to violence. It addresses two target groups – the professional community and children and their families. Since its establishment in November 2002, CHERISH has developed a circle of more than sixty Palestinian and Israeli health professionals who have participated in its various forums, workshops and activities. In 2006-2007, Project CHERISH trained over forty Palestinian and Israeli social workers and school counselors in cognitive behavioral therapy for children suffering from psychological trauma. The project's goal is to increase awareness of the symptoms of psychological trauma in children and to streamline procedures for children and their families to access treatment.

Project Partners: JDC-Middle East Program, Israel; Israel Center for Treatment of Psycho social trauma of Herzog Hospital, Israel; Center for Development in Primary Health Care/ Al-Quds University (Ramallah)

Website:

<http://www.projectcherish.org/index.php>

Key Contacts:

- email for project: info@projectcherish.org
- Randi Garber - Director, JDC – Middle East Program. email: randig@jdc.org.il
- Prof. Mohammad Shaheen - Dean, School of Public Health, Al-Quds University. email: cdphc@palnet.com
- Dr. Danny Brom - Director, Israel Center for Treatment of Psychotrauma, Herzog Hospital. email: dbrom@netvision.net.il

Canada International Scientific Exchange Program (CISEPO): Student Summer Cooperative Program

Mission and Goals: The CISEPO student summer elective brings Israeli, Palestinian, Jordanian and Canadian medical students and PhD candidates together to study child nutrition issues at the Hospital for Sick Children at the University of Toronto. This

summer student cooperative program, which began in June 2003 (with 2003 focusing on pediatric cancer; and 2004 focusing on genetic hearing loss), is a component of CISEPO's mission in the Middle East to build trust and confidence across the Arab and Israeli divide by working with the next generation of community and health leaders. The current leadership of the International Pediatric Emergency Medicine summer student elective (CISEPO/IPEME) – now in its fifth year – includes Abi Sriharan, (Deputy Director (Peter A Silverman Centre for International Health, Mount Sinai Hospital), Dr. Dennis Scolnik (Hospital for Sick Children) and Dr. Rahim Valani, (Sunnybrook Health Sciences Center). As the students work and live together, the bridges of human understanding built on the common ground of the health sector forges lasting people-to-people links across borders. The ultimate objective for the program is for returning students to foster a wider network of knowledge and cooperation among their colleagues using this CISEPO model.

Project Partners: Canada International Scientific Exchange Program (CISEPO), Israel; University of Toronto, Canada; Al-Quds University, East Jerusalem; Jordan University of Science and Technology; Edith Wolfson Medical Center, Israel; Tel Aviv University, Israeli; other Palestinian and Israeli health institutions

Website:

http://128.100.113.105/Student_Projs.html

Key Contact:

- Professor Arnold Noyek – Chair, CISEPO.
email: arnold.noyek@utoronto.ca

Coexistence Through Medicine – Emek Medical Center

Mission and Goals: Over the past several years, Emek Medical Center in Afula, Israel, has hosted seminars for health care and hospital officials from the Palestinian territories. Attendees participated in a day-long series of medical lectures in Arabic and Hebrew presented by members of Emek's multi-ethnic staff.

Project Partners: Emek Medical Center, Israel; Palestinian health professionals and hospital officials

Website: <http://www.clalit.org.il/haemek/Content/Content.asp?CID=122&u=352>

Key Contact:

- Dr. Larry Rich - Director of Development and International Public Relations, Emek Medical Center. email: rich_l@clalit.org.il

Cooperative Program in Public Health

Mission and Goals: Four institutions located in Israel, the Palestinian Authority, and the United States, signed a memorandum of understanding to facilitate cooperative efforts in public health. Participating in this initiative are three schools of public health - The Braun School of Public Health of Hebrew University and Hadassah Medical Organization, Al-Quds School of Public Health, Rollins School of Public Health of Emory University - as well as the U.S. Centers for Disease Control and Prevention (CDC). The project has obtained funding from the United States-Israel Bi-national Science Foundation to hold a workshop in Jerusalem in 2009 as one component of a series of initiatives that will occur to implement the memorandum of understanding. Additional funding has been obtained from Hebrew University and Emory University. At the 2009 meeting, teams from the four partner institutions, in addition to other invited participants, will discuss opportunities and develop research and programmatic proposals for funding in four thematic areas: (a) Non-infectious diseases and lifestyle; (b) Environmental health; (c) Reproductive health; and, (d) Health promotion and education. The initiative is now in the preparatory phase in which the four thematic groups moderated by Palestinian and Israeli researchers are working through the web to discuss ideas and prepare working documents. In addition, these researchers are developing a program proposal to be submitted for funding to private donors as well as developing a proposal on family planning and contraceptives.

Project Partners: Braun School of Public Health and Community Medicine of Hebrew University and Hadassah Medical Organization, Israel; Al-Quds School of Public Health, East Jerusalem; Rollins School of Public Health of Emory University, United States; Centers for Disease Control and Prevention, United States

Key Contacts:

- Dr. Henry Falk – Director, Center for Environmental Health and Injury Control, Centers for Disease Control and Prevention.
email: hxf1@cdc.gov

- Professor Mohammad Shaheen – Dean, School of Public Health, Al-Quds University. email: cdphc@palnet.com
- Dr. Ronny Shtarkshall - The Braun School of Public Health and Community Medicine of the Hebrew University and Hadassah Medical Organization. email: ronnys@ekmd.huji.ac.il
- Professor Aryeh D. Stein, Rollins School of Public Health, Emory University. email: aryeh.stein@emory.edu

Coping with Breast Cancer among Palestinian and Israeli Women (Project COPE)

Mission and Goals: The mission of Project COPE is to address the needs of Israeli and Palestinian breast cancer patients and improve the skills of health care professionals to diagnose and treat the disease in the region. The project ran from 2000-2006, and included joint meetings of Palestinian and Israeli breast cancer survivors, health care professionals, and training courses. Between 2000-2003, forty breast cancer survivors and fifty health professionals participated in 25 educational events. This project established a network of volunteers to advise women recently diagnosed with breast cancer, as well as created a breast cancer information and support hotline. Israeli and Palestinian participants also traveled together to attend international conferences, gaining skills and sharing their experiences with the global community.

Project Partners: JDC-Middle East Program; the Patient's Friends Society (PFS), Jerusalem; the Israel Cancer Association (ICA); Augusta Victoria Hospital; Israel Association for the Advancement of Women's Health (IAAWH)

Website: <http://brookdale-en1.pionet.com/files/Project-COPE-Breast-Cancer.pdf>

Key Contact:

- Randi Garber – Director, JDC – Middle East Program. email: randig@jdc.org.il

Delivery Systems for Substance Abuse Treatment: An International Conference

Mission and Goals: In September 2005, prominent substance abuse experts from Israel, the Palestinian Authority, and twenty-three countries gathered in Istanbul, Turkey to share information on the public

health problem of substance abuse, promoting regional cooperation on substance abuse issues, and discussing the integration of substance abuse treatment services with primary care, mental health, and social service systems. Countries in attendance included Iraq, Iran, Israel, Palestine, Afghanistan, Russia, and the United States. The conference included presentations on diagnosing substance use and providing services for people with addictive disorders. The conference also addressed the benefits and limits of integrating substance abuse treatment within the health, social, and criminal justice systems. Based on the evaluations and follow-up to the meeting, many of the participants pursued professional exchanges based on discussions and contacts made at the conference.

Project Partners: Substance abuse experts from 23 different countries; UCLA Integrated Substance Abuse Programs, United States; World Health Organization; United Nations Office on Drugs and Crime

Website:

<http://www.uclaisap.org/dssat2005/index.html>

Key Contact:

- Valerie Pearce - Project Director. email: vjpearce@ucla.edu

Dermatology for Peace

Mission and Goals: The Dermatology for Peace program, established by Hadassah Medical Organization, has provided training opportunities for Palestinian physicians interested in the field of dermatology. Faculty at Hadassah Medical Center met with Palestinian dermatologists in Nablus and hosted these health care specialists at the Dermatology Department of Hadassah Hospital. A number of cooperative projects have been agreed upon, including a postgraduate training course for Palestinian dermatologists, monthly consultations rotating between Nablus and Jerusalem, and a series of symposia on dermatological issues featuring invited speakers from around the world. The program was established by Professor David Enk, a senior dermatologist at Hadassah Medical Organization, but is no longer in operation.

Project Partners: Hadassah Medical Organization, Israel; Palestinian dermatologists, West Bank

Website: <http://www.hadassahinternational.org/news/article.asp?id=961>

Key Contact:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization.
email: ron@hadassah.org.il

Empowering Communities in Home Safety (ECHOS)

Mission and Goals: Through the ECHOS initiative, project partners are working to prevent home accidents (the leading cause of injury and death among children worldwide) and to help parents to create safe environments for their children. The project is a partnership of the JDC-Middle East Program, the Patient's Friends Society - Jerusalem, the Jerusalem Princess Basma Center, and Beterem - Israel Center for Children's Safety and Health. The goal of the initiative is to engage community "agents of change" around the issue of home safety and to develop culturally appropriate materials. In 2007, a survey of home unintentional injuries was carried out in clinics in both communities. The findings are being used by the partner organizations to target child safety education initiatives and will be presented in international forums and through a joint report.

Project Partners: JDC-Middle East Program; Patient's Friends Society - Jerusalem; Jerusalem Princess Basma Center; Beterem - Israel Center for Children's Safety and Health

Website: http://www.jdc.org/nonsect_currresp_mideast.html

Key Contact:

- Randi Garber - Director, JDC - Middle East Program. email: randig@jdc.org.il

Empowerment and Resilience in Children Everywhere (ERICE)

Mission and Goals: Founded in 2004, ERICE has brought together child mental health professionals from Israel, the West Bank and Gaza to discuss how best to work together to improve the lives of children in the region. The first meeting was held in 2004 in Jerusalem, and the group continues to convene in the region and in Europe. ERICE is affiliated with a number of leading Israeli, Palestinian, Italian and American universities. Six pilot programs have been partially funded: "Assessing Post-Traumatic Distress in Infants and Young Children: A Multi-Dimensional Approach", "Children in War: A Look at the Inner

World of Palestinian and Israeli Children via their Dreams", "The Development of an Evidence Guided Approach to Child Mental Health in Arab Populations in Palestine and Israel", "An Evaluation of Special Education Programs for Palestinian and Israeli Children", "Pilot Surveillance of PTSD among Children in Israel and the Palestinian Authority", and "Enhancing the Psychosocial Health and Empowering the School Age Children in Gaza." The next round of grant requests will support capacity building projects that involve both Israeli and Palestinian professionals focused on positively impacting the lives of Palestinian and Israeli children. The work has been supported by the Fondazione per lo Studio e la Ricerca sull'Infanzia e l'Adolescenza, the Italian Government, and the International Association for Child and Adolescent Psychiatry and Allied Disciplines. Thus far, the project has also secured external funding from the National Alliance for Research on Schizophrenia and Depression and the United States-Israel Bi-national Science Foundation.

Project Partners: Yale University, United States; Al-Quds University, East Jerusalem; Tel Aviv University, Israel; Hadassah Medical Organization/Hebrew University, Israel; Bar-Ilan University, Israel; University of Rome, Italy

Website: <http://studentpages.scad.edu/~rstern20/erice/index.html>

Key Contacts:

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email: galili@hadassah.org.il
- Mustafa Qossoqi, PhD
- Al Hazem Hashour, M.D.

Genetic Research Collaboration

Mission and Goals: Beginning in the late 1990s (under the auspices of the Canada International Scientific Exchange Program's (CISEPO) Middle East Association for Managing Hearing Loss (MEHA) initiative), Professor Moien Kanaan of Bethlehem University and Professor Karen Avraham of Tel Aviv University began a cooperative initiative on genetics research. Along with researchers at the University of Washington, they have been investigating the genes behind inherited deafness. This project has received funding from the

National Institutes of Health and other organizations to conduct research as well as to sponsor Palestinian scientists to study at Tel Aviv University. A graduate research program has been established to enable Palestinian students to pursue post-graduate research in this field at Tel-Aviv University.

Project Partners: Tel Aviv University, Israel; Bethlehem University, West Bank; University of Washington, United States

Website: <http://www.bethlehem.edu/centers/hrl.shtml> and <http://www.tau.ac.il/~karena/>

Key Contacts:

- Karen Avraham, PhD - Chair, Department of Human Molecular Genetics and Biochemistry, Sackler School of Medicine, Tel-Aviv University. email: karena@post.tau.ac.il
- Moien Kanaan, PhD - Dean of Science and Hereditary Research Lab Director, Bethlehem University. email: mkanaan@bethlehem.edu

The Hadassah Medical Center - Augusta Victoria Hospital Exchange Program

Mission and Goals: The Augusta Victoria Hospital in East Jerusalem has established a Cancer Center to serve patients from the West Bank and Gaza. This Center includes basic radiation and chemotherapy services. The Hadassah Medical Center has committed resources to help train staff and provide physicist expertise to ensure the delivery of quality oncology services at the Augusta Victoria Hospital. Furthermore, Hadassah's Department of Oncology provides treatment for complicated patient cases whose care requires specialized services that are not available at the Augusta Victoria Hospital. This cooperative program has helped foster dialogue between Israelis and Palestinians as well as the development of a much needed cancer program to serve the Palestinian population of the West Bank and Gaza.

Project Partners: Augusta Victoria Hospital, East Jerusalem; Hadassah Medical Organization, Israel

Website: <http://www.jmeduk.org/portal/articles/30/1/Hadassah-And-The-Palestinian-Authority/Page1.html>

Key Contacts:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization. email: ron@hadassah.org.il

- Dr. Tawfiq Nasser - Chief Executive Officer/ Director General, Augusta Victoria Hospital. email: tnasser@avh.org

Hadassah Medical Organization - Advanced Resuscitation Training

Mission and Goals: This two-week summer school education and social program has taken place annually over the past three years. The course is conducted in English and is intended for a select group of 14-18 year-old high school students from Palestine, Israel, Jordan, and other countries in the Middle East. The course is convened at different locations in the region and allows students to learn from some of the world's leading cardiologists and other health educators.

Project Partners: Hadassah Medical Organization, Israel

Website: <http://www.hadassahuk.org/why.asp?IntID=147>

Key Contact:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization. email: ron@hadassah.org.il

The Hadassah-St. John Eye Hospital Human Resources Development Program in Ophthalmology

Mission and Goals: This project, dedicated to exchanging knowledge about eye diseases between Palestinian and Israeli hospitals and health professionals, represents a unique opportunity to raise the standard of care in both communities while simultaneously harnessing medicine in the service of peace. The program involves joint specialist clinics at St. John Eye Hospital, a combined residency program at St. John Eye Hospital and the Hadassah Department of Ophthalmology, and joint specialist clinics at Hadassah Medical Center for patients who have been referred from St. John's Hospital.

Project Partners: St. John Eye Hospital, East Jerusalem; Hadassah Medical Organization, Israel

Website: http://www.stjohnseyehospital.org/content_subsection.asp?id=60&catid=23

Key Contacts:

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- Dr. Jeanne Garth - Medical Director, St. Johns Eye Hospital. email: meddir@sjeh.org

Healing Across the Divides – Breast Cancer Project

Mission and Goals: Partially funded by the NGO Healing Across the Divides, and implemented by Physicians for Human Rights–Israel and the Union of Palestinian Medical Relief Committees, the Breast Cancer Project is working to increase awareness and promote screening and treatment of breast cancer in Israeli and Palestinian women. The objectives of this project are to enhance awareness about breast cancer among high risk women, improve breast self-examination rates, increase the utilization of mammography, improve self-esteem in the participants, and provide social support.

Project Partners: Healing Across the Divides, United States; Physicians for Human Rights, Israel; the Union of Palestinian Medical Relief Committees, Palestinian Territories

Website: <http://www.healingdivides.org/pages/breastCancer.htm>

Key Contact:

- Norbert Goldfield, MD - Executive Director, Healing Across the Divides.
email: norbert@healingdivides.org

Healing Across the Divides - Diabetes and Hypertension Monitoring and Treatment System in Disadvantaged Israeli and Palestinian Communities

Mission and Goals: Sponsored by Healing Across the Divides, a non-governmental organization, this project seeks to improve access to care and promote empowerment in Palestinian and Israeli patients with diabetes. This initiative represents a partnership between Healing Across the Divides, the Union of Palestinian Medical Relief Committees and The Galilee Society, a Palestinian non-partisan NGO operating in Israel. The project objectives are to establish a trilateral steering committee to oversee the development and operation of a diabetes and hypertension monitoring system, develop and implement treatment protocols, train local project leaders in health promotion/self-management techniques, and establish a system for monitoring hospital admissions related to cases of diabetes and hypertension. The

project encourages interaction among Israeli, Palestinian, and American health professionals and exposes U.S. organizations to the health issues faced by disadvantaged Israeli and Palestinian communities.

Project Partners: Healing Across the Divides, United States; Union of Palestinian Medical Relief Committees, Palestinian Territories; The Galilee Society – The Arab National Society for Health Research and Services, Israel

Website: <http://www.healingdivides.org/pages/projects.htm>

Key Contact:

- Norbert Goldfield, MD - Executive director, Healing Across the Divides.
email: norbert@healingdivides.org

Holy Land Medical Project

Mission and Goals: The Holy Land Medical Project is a partnership of the Rotarian Medical Aid Charity in the United Kingdom called Saving Lives and the Universal Peace Federation's Middle East Peace Initiative. The founder of Saving Lives and several doctors and officials from Birmingham Children's Hospital in the United Kingdom have visited Israel and Palestine to meet with officials and identify areas for cooperation. The program has the support of several Palestinian and Israeli health professionals and leaders, including the staff at Caritas Baby Hospital in Bethlehem and several staff members at Hadassah Medical Organization in Jerusalem. Thus far, Birmingham Children's Hospital has agreed to support pediatric training, equipment needs and telemedicine support for Caritas Baby Hospital. The program is also exploring establishing medical training centers in the West Bank and a local committee of Israeli and Palestinian medical professionals to oversee the delivery of services.

Project Partners: Saving Lives, United Kingdom; Universal Peace Federation's Middle East Peace Initiative, Europe; Birmingham Children's Hospital, United Kingdom; Hadassah Medical Organization, Israel; Caritas Baby Hospital, West Bank; Hebron Government Hospital, West Bank

Website: http://www.upf-deutschland.de/upfn_ews/medicalproject.htm

Key Contact:

- Robin Marsh - Secretary General, Universal Peace Federation, United Kingdom.
email: pa@iifwp.org.uk

International Congress on Chronic Disorders in Children

Mission and Goals: Convened in April 2007, this conference brought together 300 Israeli and 100 Palestinian doctors and other health professionals to discuss the treatment and prevention of pediatric chronic diseases including asthma, diabetes and genetic disorders. The conference also marked the opening of Israel's first comprehensive center for the treatment of pediatric chronic diseases at Hadassah Hospital – Mt. Scopus. Four more annual conferences on chronic disease in children are planned.

Project Partners: Hadassah Medical Organization, Israel; Shalva, the Jerusalem Center for Mentally and Physically Challenged Children, Israel

Website: <http://ima.org.il/wf/atg/atg-jun-07/atg6591.pdf>

Key Contact:

- Eitan Kerem, M.D. – Chair, Department of Pediatrics, Hadassah University Hospital - Mount Scopus

International Network of Knowledge through Electronic Learning

Mission and Goals: Created in 2005, the International Network of Knowledge through Electronic Learning is an education and distance learning system managed by the Peter A. Silverman Global eHealth Program at the Center for International Health at Mount Sinai Hospital, in Toronto, Canada. Tele-health rounds are delivered in real time in Canada and the Middle East on topics that include the diagnosis and current treatment of some of the most devastating neurological and psychiatric conditions afflicting aging adults, such as Alzheimer's disease, depression, and Parkinson's disease. Medical experts and community health professionals, residents and students view the same patient cases and then engage in discussion, exchanging ideas and expert opinions.

Project Partners: The Peter A. Silverman Centre for International Health at Mount Sinai Hospital, Canada; Canada International Scientific Exchange Program (CISEPO), Canada; The Baycrest Center, Toronto, Canada; Department of Public Health Sciences at the University of Toronto, Canada; Edith Wolfson Medical Center, Israel; Tel Aviv University, Israel; Jordan University of Science and Technology; Al Quds University, East Jerusalem

Website: http://www.baycrest.org/News_and_Media/News_Releases_2005/default_8832.asp

Key Contacts:

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- Yehudah Roth, MD – Israeli Co-Director, CISEPO. email: orl@wolfson.health.gov.il
- Ziad Abdeen, PhD, MPH – Palestinian Co-Director, CISEPO. email: zabdeen@planet.edu

Israeli-Palestinian Science Organization (IPSO)

Mission and Goals: The Israeli-Palestinian Science Organization (IPSO) is a non-political, not-for-profit organization based in Jerusalem. IPSO is dedicated to fostering and sustaining cooperation between Israelis and Palestinians to promote dialogue and interaction among scholars and scientists in the region. The organization's mission is to identify areas of science where cooperation between Israelis and Palestinians is feasible and productive, to build a science and scholarship-based bridge of good will, to create an environment for Israeli and Palestinian scholars and scientists to meet and establish dialogue, and to support joint scholarly and scientific projects through funding and administrative assistance. In 2004-2006, IPSO received over 100 proposals requesting funding for cooperative work in the medical and environmental fields.

Project Partners: Israeli and Palestinian scientists and universities

Website: <http://www.ipso-jerusalem.org/>

Key Contacts:

- Dan Bitan, PhD - Co-Director, The Israeli-Palestinian Science Organization. email: danbitan@ipso-jerusalem.org
- Hassan Dweik, MSc, PhD - Executive Vice President, Al-Quds University; Co-Director, The Israeli-Palestinian Science Organization. email: hdweik@planet.edu

Master of Public Health Degree Program at the Braun School of Public Health, Hebrew University

Mission and Goals: Each year physicians, nurses and health administrators from the Palestinian Authority

participate in a full time course organized by the Braun School of Public Health and Community Medicine at Hebrew University. Students who complete the training receive a Masters in Public Health (MPH) degree.

Project Partners: Hebrew University of Jerusalem, Israel; Hadassah Medical Organization, Israel

Website: <http://publichealth.huji.ac.il/eng/programs.asp?cat=100&in=0>

Key Contact:

- Professor Theodore Tulchinsky - Senior Professor, Braun School of Public Health and Community Medicine, Hebrew University-Hadassah Medical Organization.
email: tedt@hadassah.org.il

Medilink - Training Palestinian Doctors in Israel

Mission and Goals: The objective of this program is to strengthen the Palestinian medical system by providing fellowships and training programs for Palestinian doctors in Israeli hospitals, thereby enhancing the services available through the Palestinian medical system and nurturing Palestinian-Israeli relationships. Over seventy Palestinian doctors have participated in this initiative so far, undertaking fellowships in Israeli hospitals in a wide variety of fields. Some specific training programs include Peace in Sight, a three year initiative to train Palestinian ophthalmologists, carried out in partnership with St. John Eye Hospital and Hadassah Medical Center and supported by the U.S. State Department; and Bridging the Gap, a two year program of monthly meetings for Palestinian and Israeli pediatricians, carried out in partnership with Makassed Islamic Hospital, Augusta Victoria Hospital, Palestinian Red Crescent Society Hospital in Gaza City and the Pediatric Department of Hadassah Mt. Scopus Medical Center.

Project Partners: Peres Center for Peace, Israel; St. John Eye Hospital, East Jerusalem; Hadassah Medical Organization, Israel; Makassed Islamic Hospital, East Jerusalem; Augusta Victoria Hospital, East Jerusalem; Palestinian Red Crescent Society Hospital, Gaza City

Website: <http://www.peres-center.org/SectionProject.asp?cc=01140202>

Key Contact:

- Dr. Danny Shanit - Deputy Director General and Director of Medicine and Health Care Department, Peres Center for Peace.
email: shanit@peres-center.org

Middle East Association for Managing Hearing Loss (MEHA)

Mission and Goals: Facilitated by the Canada International Scientific Exchange Program (CISEPO), this initiative was established in May 1998 as the first joint Arab and Israeli professional association. As of 2005, six meetings of the MEHA steering committee have been held in the region. Through this program almost 17,000 Arab and Israeli newborns were tested for hearing loss between April 2001 to June 2004, and over 300 Canadian hearing aids have been distributed to infants in the region.

Project Partners: Canada International Scientific Exchange Program (CISEPO), Canada; University of Toronto, Canada; Al-Quds University, East Jerusalem; Jordan University of Science and Technology; Edith Wolfson Medical Center, Israel; Tel Aviv University, Israel; and other Palestinian and Israeli health institutions

Website: <http://128.100.113.105/Project1.html>

Key Contacts:

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- Yehudah Roth, MD – Israeli Co-Director, CISEPO. email: orl@wolfson.health.gov.il
- Ziad Abdeen, PhD, MPH – Palestinian Co-Director, CISEPO. email: zabdeen@planet.edu

Middle East Association for Mother and Child Health (MEMCHA)

Mission and Goals: MEMCHA's vision is to deliver quality medical and public health care for women and children in the Middle East through the cooperative efforts of Israeli, Palestinian and Jordanian professionals, institutions and non-governmental organizations.

Project Partners: MEMCHA is a project of the Canada International Scientific Exchange Program (CISEPO), Canada; University of Toronto, Canada; Al-Quds University, East Jerusalem; Jordan University of Science and Technology; Edith Wolfson

Medical Center, Israel; Tel Aviv University, Israel; and other Palestinian and Israeli health institutions

Website: <http://128.100.113.105/MEMCHA.html>

Key Contacts:

- Professor Arnold Noyek – Chair, Canada International Scientific Exchange Program (CISEPO). email: arnold.noyek@utoronto.ca
- Yehudah Roth, MD – Israeli Co-Director, CISEPO. email: orl@wolfson.health.gov.il
- Ziad Abdeen, PhD, MPH – Palestinian Co-Director, CISEPO. email: zabdeen@planet.edu

Middle East Cancer Consortium (MECC)

Mission and Goals: The Middle East Cancer Consortium (MECC) was established in 1996 through an official agreement of the Ministries of Health of Israel, the Palestinian Authority, Cyprus, Egypt, Israel, and Jordan (Turkey joined in 2004). The signing of this agreement was witnessed by the United States Secretary of Health and Human Services and the Director of the National Cancer Institute. The goal of the MECC is to raise cancer awareness in the Middle East, and ultimately, to reduce the burden of cancer in the region through the support of cooperative research. Specific projects include the establishment of population-based cancer registries in all six jurisdictions, the development of a cooperative research grants program, and the development of training programs in palliative care. Many important cooperative projects have been carried out between Israeli and Palestinian researchers and physicians under the MECC small grants program. Additionally, numerous productive conferences and workshops have been conducted involving researchers and health professionals from the Middle East and the United States.

Project Partners: Health Ministries of Israel, the Palestinian Authority, Cyprus, Egypt, Jordan, Turkey, and the United States

Website: <http://mecc.cancer.gov>

Key Contact:

- Michael Silbermann, DMD, PhD - Executive Director, MECC. email: cancer@mecc-research.com.

Middle East Consortium on Infectious Disease Surveillance (MECIDS)

Mission and Goals: The Middle East Consortium on Infectious Disease Surveillance is a partnership between the Ministries of Health in Israel, the Palestinian Authority, and Jordan to share data on food-borne disease outbreaks and other infectious disease concerns. The Consortium is assisted by the Global Health and Security Initiative of the Nuclear Threat Initiative and other international regional organizations. The Egyptian Ministry of Health has also participated in this project. As part of the initiative, joint training courses have been convened on epidemiology and on laboratory technologies for evaluating infectious diseases, further promoting collaboration in the region. With the support of IBM, a project is underway to develop innovative software for a data-sharing network for the MECIDS partners. MECIDS will strengthen the ability to detect and monitor infectious diseases in the participating nations, creating a new mechanism for sharing medical information across borders.

Project Partners: Al Quds University, East Jerusalem; Cooperative Monitoring Center, Amman, Jordan; European Program on Interventional Epidemiology Training; Health Ministries of Israel, Jordan, and the Palestinian Authority; Sandia National Laboratories, United States; Search for Common Ground, United States; Tel Aviv University, Israel; Nuclear Threat Initiative's Global Health and Security Initiative, Washington, D.C., United States; World Health Organization

Website: <http://www.ghsi.org/projects/mecids.html>

Key Contact:

- Terence Taylor, MD - Director, Nuclear Threat Initiative. email: taylor@nti.org

The Middle East Regional Cooperation Program (MERC), USAID

Mission and Goals: The U.S. Agency for International Development MERC Program funds cooperative research projects in the areas of agriculture, health, environment, economics, and engineering between Israel and its Arab neighbors. In general, MERC grants focus on research rather than institution building, with a developmental impact (economic, environmental, policy, etc.) expected in the near rather than distant future. MERC has two primary goals: promoting research for development and improving cooperation in the region.

Established as a result of the Camp David Peace Accords to promote Arab-Israeli cooperation, it has expanded beyond its original participants, Egypt and Israel, to include many institutions throughout the region. To date, the program has also funded activities with participation from Jordan, Morocco, West Bank/Gaza, Lebanon, and Tunisia. MERC grants are funded at a level below \$1,000,000 (usually over a 3-5 year period) and pre-proposals are required.

Project Partners: Arab and Israeli institutions that develop and submit joint research proposals

Website: http://www7.nationalacademies.org/dsc/USAID_MERC_Program.html;
<http://usembassy-amman.org.jo/enviro/merc1.html>

Key Contact:

- Research Support Program for USAID.
email: review@nas.edu

Middle East Symposium on Dental Medicine

Mission and Goals: This symposium on dental implants was held during the winter of 2006-2007. Al-Quds University Faculty of Dentistry and Hebrew University-Hadassah School of Dental Medicine signed an agreement to promote cooperation between academic faculty and students in research, teaching and clinical work. The symposium was conducted under the auspices of the Walter Cohen Middle East Center for Dental Studies at the Hebrew University-Hadassah School of Dental Medicine and also included Case Western Reserve, Drexel, Harvard, and the University of Pennsylvania in the United States and Hacettepe University in Turkey. Additionally, the Walter D. Cohen Middle East Center for Dental Studies offers a six-week course for dentists from the Palestinian Authority, Jordan and other countries in the Middle East. This program began in 1998 with the participation of eight dentists (two each from Palestine, Jordan, Turkey, and Cyprus). Last year, eleven participants were included, and in 2008, a course was held for six students. Another symposium is being planned for later this year.

Project Partners: Walter D. Cohen Middle East Center for Dental Studies, Israel; Al-Quds University Faculty of Dentistry, East Jerusalem; Case Western Reserve University, United States; Drexel University, United States; Harvard University, United States; University of Pennsylvania, United States; Hacettepe University, Turkey

For more information: <http://www.nature.com/bdj/journal/v202/n1/full/bdj.2007.6.html>

Key Contacts:

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- Dr. Musa Bajali - Dean, Al-Quds University Faculty of Dentistry.
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The Mother and Child Fellowship Program at Hebrew University-Hadassah Medical Organization

Mission and Goals: A course for Palestinian physicians is held on maternal-child health issues at the School of Public Health and Community Medicine at Hebrew University-Hadassah Medical Organization.

Project Partners: Hadassah Medical Organization, Israel

Website: <http://www.jmeduk.org/portal/articles/30/1/Hadassah-And-The-Palestinian-Authority/Page1.html>

Key Contact:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization.
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Palestinian-Israeli Students Mental Health Working Group

Mission and Goals: In January 2007, the Peres Center for Peace, working with the Gaza Community Mental Health Program and Ossim Shalom – Social Workers for Peace, conducted a workshop for Palestinian and Israeli students studying mental health issues. The participants came from Israel and the Gaza strip. The workshop focused on the connection between mind and body in reaction to trauma and treatment techniques developed by the Center for Mind-Body-Medicine in Washington, D.C. Participants also were involved in team building activities and toured Jerusalem together. A second gathering was held in February 2007 for students studying social work, psychology and related fields.

Project Partners: Peres Center for Peace, Israel; Gaza Community Mental Health Program, Gaza Strip; Ossim Shalom – Social Workers for Peace, Israel; Center for Mind-Body Medicine, Washington, DC

Website: <http://peres-center.org/SectionProject.asp?cc=0111020404>

Key Contact:

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Israeli-Palestinian Pediatric Rehabilitation Forum

Mission and Goals: The goal of the Pediatric Rehabilitation Forum is to bring together Palestinian and Israeli professionals in the pediatric rehabilitation field (physiotherapists, occupational therapists and speech and language pathologists) to share information on current developments and discuss practical and culturally sensitive ways to meet the needs of children with developmental disabilities and their families. In 2008, the Forum will begin an applied research project to evaluate the effectiveness of a parent-centered intervention to improve the participation of school-aged children with cerebral palsy in the region.

Project Partners: JDC-Middle East Program

Website: <http://brookdale.jdc.org.il/default.asp?catid=%7BE6974578-E2BC-4A1E-955D-5104048B4ABC%7D>

Key Contact:

- Randi Garber – Director, JDC – Middle East Program. email: randig@jdc.org.il

Partnership on Specialist Graduate Training for Physicians

Mission and Goals: This training program at Hadassah University Medical Center in Jerusalem allows Palestinian physicians completing a full-time specialist training course to receive a diploma that will allow them to provide medical care in their home towns in the West Bank and Gaza. Physicians who have completed this program often return to Hadassah Hospital to participate in meetings, receive medical consultations on their patients if needed, and in some instances, continue to work at Hadassah Medical Center. Eight to ten Palestinian physicians participate in this program annually. Approximately thirty physicians have completed this specialty training program, which is coordinated with the Palestinian Authority. Many types of specialty care were previously unavailable in the Palestinian Territories, including dermatology, endocrinol-

ogy, oncology, hematology, radiology, anesthesiology and neurosurgery. A doctor who specialized in neurosurgery at Hadassah Medical Center is now the Head of Neurosurgery at Beit Jallah Hospital near Bethlehem, and a physician who received specialist training in neurology at Hadassah Hospital is now one of the most prominent neurologists in the West Bank and on the staff of the Beit Jallah Hospital. This program is one of the many cooperative programs initiated by Hadassah Medical Center, as part of their mission to serve as a bridge to peace.

Hadassah Medical Center was founded and is owned and supported by Hadassah, the Women’s Zionist Organization of America.

Project Partners: Hadassah University Medical Organization, Israel; Palestinian Authority and Palestinian health professionals

Website: www.hadassah.org.il

Key Contact:

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Peace of Mind Initiative – Peres Center for Peace

Mission and Goals: The Civil Society Cooperation and Dialogue Unit of the Peres Center for Peace established the “Peace of Mind” Initiative in 2004. The mission of this Initiative is to promote cooperation between the Palestinian and Israeli mental health sectors and to encourage the exchange of knowledge and expertise. This project brings together Palestinian and Israeli mental health professionals (psychologists, psychiatrists, social workers, educational consultants and others) through working group activities led by joint professional teams that address specific clinical topics. The Japanese Government has helped sponsor two working groups on “Socio-Emotional Development of Infants and Toddlers” (2004-2006) and investigating “Community Intervention in Times of Crisis” (2005). In addition to the working group activities, the Peres Center recently held a public meeting on “Dealing with Trauma: The Role of Mental Health Professionals in Conflict Societies, the Israeli-Palestinian Case” (2006).

Project Partners: Peres Center for Peace, Israel; Japanese government; Palestinian and Israeli Mental Health Professionals

Website: <http://peres-center.org/SectionProject.asp?cc=01110202>

Key Contact:

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Pediatric Hematology-Oncology Unit: A Partnership of Augusta Victoria Hospital and Hadassah Medical Organization

Mission and Goals: This initiative provides support to the Pediatric Oncology Center for the diagnosis and treatment of cancer in children at Augusta Victoria Hospital in East Jerusalem, in cooperation with the Department of Pediatric Hematology-Oncology at Hadassah Medical Organization in Israel. The program includes an intensive training program in specialized care for clinical and supportive teams and services. It also includes an acquisition program for equipment and supplies to establish a point-to-point broadband telemedicine network that can enable the support team at the Hadassah Medical Center to provide medical consultations to the Palestinian Hematology-Oncology team at Augusta Victoria Hospital. Assistance is also being provided to physically refurbish the Pediatric Department at Augusta Victoria Hospital. Fifteen Palestinian doctors and medical personnel have completed a 2-year training program in Israeli hospitals.

Project Partners: Peres Center for Peace, Israel; Augusta Victoria Hospital, East Jerusalem; Hadassah Medical Organization, Israel

Website: <http://www.peres-center.org/SectionProject.asp?cc=01140203>

Key Contact:

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Save A Child's Heart – Heart of the Matter Project

Mission and Goals: Save a Child's Heart (SACH) provides free pediatric heart surgery and follow-up care for children in developing countries. The organization operates out of the Edith Wolfson Medical Center in a suburb of Tel Aviv, Israel. Since its founding 13 years

ago, SACH has provided lifesaving open-heart surgery to over 2000 children from developing countries, including 900 children from the Palestinian Authority. SACH has been working in cooperation with prominent cardiologists from the West Bank and Gaza since its founding.

Over the past four years, Save a Child's Heart has been conducting the Heart of the Matter project, which provides free cardiac treatment for Palestinian children and offers capacity building for Palestinian physicians through an outreach training program in pediatric cardiac care. The Heart of the Matter project has been co-sponsored by the European Commission's Partnership for Peace Program. Under the auspices of this project, SACH was able to substantially increase the number of Palestinian children treated and Palestinian physicians trained: over 800 Palestinian children have received care at a free weekly cardiology clinic for Palestinian children, and over 400 Palestinian children have undergone open-heart surgery under this project. SACH has also provided in-depth post-graduate training for Palestinian physicians in pediatric cardiology, anesthesiology and prenatal diagnosis, and coordinated joint medical conferences and seminars between physicians from the Palestinian Authority, Israel and the international medical community. The Israeli and Palestinian cardiologists examine children on a daily basis both in Israel and the Palestinian Authority, and conduct joint consultations on the children's cases. When needed, the Palestinian children are referred for treatment at the Edith Wolfson Medical Center. SACH also conducted surveys and published two reports assessing the effect of SACH activities on the attitudes of Palestinian and Israeli parents of children hospitalized during the program towards the members of each other's communities. The program has also assessed the level of cooperation and communication between Palestinian and Israeli physicians participating in the program. The funding received by the EU Commission has recently ended and SACH is currently seeking support in order to maintain the scope of this project.

Project Partners: Edith Wolfson Medical Center, Israel; West Bank and Gaza Cardiologists and Hospitals

Website: <http://www.saveachildsheart.org>

Key Contact:

- Simon Fischer, JD - Executive Director, Save a Child's Heart Foundation.
email: director@saveachildsheart.org

Saving Children Project

Mission and Goals: The “Saving Children” project was launched in 2003 to facilitate the referral of Palestinian infants and children to Israeli hospitals for complex case and diagnostic evaluations and surgical procedures, when such services are unavailable in the Palestinian Authority. The Peres Center facilitates logistical arrangements and covers the cost of the procedures for these children. The project is based on an extensive referral network of Palestinian pediatricians who review, prioritize, and refer the cases accordingly. One specific project involves children with severe hearing impairments who require cochlear implants (CI). As part of the program, Palestinian speech therapists as well as ear, nose and throat physicians are being trained in audiometry and advanced ear, nose, and throat (ENT) surgical procedures.

Project Partners: Peres Center for Peace, Israel; Hadassah Medical Organization, Israel; Al-Haadah Women’s Association Center, Ramallah; Augusta Victoria Hospital, East Jerusalem; Micha Jerusalem Organization, Israel; Sheba Medical Center, Israel

Website: <http://www.peres-center.org/SectionProject.asp?cc=01140201>

Saving Children Project - Educational Component

Mission and Goals: To enhance the skills of Palestinian and Israeli pediatricians, the Saving Children Project has facilitated a number of conferences that engage Palestinian, Israeli and Italian pediatricians, providing a forum for the exchange of knowledge and expertise. Since 2005, two conferences have been convened each year in Israel, the West Bank, or Italy. Past conference topics included Advanced Pediatric Life Support training at Augusta Victoria Hospital in East Jerusalem and a two day meeting on pediatric cardiology and cardiac surgery. Physicians participating in “Saving Children” also attended the 2007 International Conference on Chronic Disorders in Children organized by the Pediatric Department at Hadassah Medical Organization.

Website: <http://www.peres-center.org/SectionProject.asp?cc=0114020101>

Slim Peace Support Groups

Mission and Goals: In February 2006, Director Yael Luttwak filmed a documentary entitled “A Slim

Peace” that tells the story of American settlers, Palestinians, Israelis and Bedouins who participated in a weekly nutrition and weight loss support group facilitated by both a Palestinian and Israeli dietician. In response to the film, the United Kingdom Foundation, Charities Advisory Trust, funded Slim Peace Nutrition and Weight Loss support groups lead by dietician Suha Khoury. The groups were established in October 2007.

Project Partners: A Slim Peace Ltd; the United Kingdom Foundation, Charities Advisory Trust

Website: <http://homepage.ntlworld.com/discodog/slimpeace/html/groups.html>

Key Contacts:

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- Yael Luttwak – Director, *A Slim Peace*.
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Trauma Care Training Course – A Partnership of the Palestinian Red Crescent Society and Hadassah Medical Organization

Mission and Goals: The Palestinian Red Crescent Society (PRCS) and the Hadassah Medical Organization have been working together to improve trauma care in the region. This major joint activity has involved conducting two trauma courses organized by Hadassah Medical Organization. The objectives of the course were to improve trauma care in the region, to improve communication between the PRCS workers and the staff of the Hadassah Trauma Unit, and to promote cooperation in their joint work through people-to-people exchanges. The trauma courses were taught in Arabic and English. The first conference was attended by 18 people from the West Bank and the second by 23 students from Gaza and the West Bank. The courses included three weeks of lectures, demonstrations, and on-site visits as well as a one-week experience related to clinical areas, including surgery, emergency medicine, the trauma unit, orthopedics, neurosurgery, the recovery room, and the respiratory and pediatric intensive care units. The course, originally designed for nurses, paramedics and ambulance drivers, has also been delivered to physicians with a specially designed curriculum.

Project Partners: Hadassah Medical Organization, Israel; Palestinian Red Crescent Society, West Bank and Gaza

Key Contact:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization.
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Umbilical Cord Blood Banking

Mission and Goals: Developed in partnership with Magen David Adom in Israel and the Palestinian Red Crescent Society, this initiative provides Palestinians with the opportunity to share in the benefits of cord blood banking. This contribution to local and international umbilical cord blood banks might be used in the future for procedures such as bone marrow transplantation. Relatively little HLA (Human Leukocyte Antigen – tissue type matching for transplant purposes) data is available from the Arab world, and thus the work of this initiative may help enhance the survival chances of Palestinian children with leukemia and other major blood disorders. Palestinian nurses and midwives have received training on the extraction process for umbilical cord blood in Israeli and Palestinian hospitals as well as in Palestine from Israeli hematologists and nurses.

Project Partners: Peres Center for Peace, Israel; Magen David Adom, Israel; Palestinian Red Crescent Society, West Bank and Gaza

Website: <http://www.peres-center.org/SectionProject.asp?cc=01140204>

Youth Voices Middle East

Mission and Goals: The goal of this project, organized by CISEPO (established and led since 2004 by Professor Harvey Skinner, Dean of Health, York University and former Chair, Department of Public Health Sciences, University of Toronto), is to examine ways to engage youth in health promotion activities and create youth driven community action in the Middle East. Using low-cost technologies such as photography as well as Internet-based approaches, young people participating in this initiative document aspects of their communities and take action on selected issues of importance to them. Through these projects, youth learn cooperation, research and leadership skills. This initiative explores the potential of Internet technology to

permit young people from diverse communities to interact in their own spaces, with the goal of creating innovative models for community health promotion. While the initial project was conducted in Israel's Bedouin community in 2005, it has expanded since then to include Israeli, Palestinian, and Jordanian schools in subsequent years.

Project Partners: Canada International Scientific Exchange Program (CISEPO), Canada

Website: <http://www.globalyouthvoices.org/middle-east/index.html>

Key Contact:

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Selected Organizations Engaged in Palestine/Israel

Cooperative Health Programs

Al-Quds University

Description: Al-Quds University was founded in 1984, with its official constitution written in 1993. It is the only Arab University in Jerusalem, and provides higher education and community services within the Jerusalem area and to the neighboring towns, villages and refugee camps in the West Bank. It has ten academic faculties on four campuses: Arts, Science and Technology, Medicine, Dentistry, Public Health, Law, Qur'an and Islamic Studies, Health Professions, Engineering, and Jurisprudence. These faculties accommodate more than 6000 students from the Jerusalem area and from the districts of Bethlehem, Hebron, Jenin, Jericho, Nablus, Ramallah and Tulkarem. Faculty and students from Al-Quds University have participated in numerous joint research and training projects with Israelis related to health and medicine.

Selected Projects: Brandeis University/Al-Quds University partnership; Child Nutrition in Israel and Palestine: Seeking Joint Initiatives; Child Rehabilitation Initiative for Safety and Hope (CHERISH); Empowerment and Resilience in Children Everywhere (ERICE); International Network of Knowledge through Electronic Learning; Middle East Association for Managing Hearing Loss (MEHA);

Middle East Association for Mother and Child Health (MEMCHA); Middle East Consortium on Infectious Disease Surveillance (MECIDS); Middle East Symposium on Dental Medicine; Student Summer Cooperative Program

Website: <http://www.alquds.edu/>

Key Contact:

- Hassan Dweik, MSc, PhD - Executive Vice President, Al-Quds University.
email: hdweik@planet.edu

American Jewish Joint Distribution Committee – JDC Middle East Program

Description: The American Jewish Joint Distribution Committee (JDC) is an apolitical, non-partisan organization devoted to sponsoring rescue, relief and reconstruction programs for Jews throughout the world. In 1993, JDC launched a Middle East Program to promote cooperation among health and rehabilitation professionals in the region. Program activities aim to develop service delivery models, provide professional-to-professional seminars and training, and build local capacity. Currently, the program is focused on pediatric health, disability and rehabilitation, and learning from the cooperative experience. In partnership with other organizations, the JDC-Middle East Program is currently engaged in the Child Rehabilitation Initiative for Safety and Hope (CHERISH) for the psychosocial well-being of Israeli and Palestinian children, the Empowering Communities through Home Safety (ECHOS) Project, and the Pediatric Rehabilitation Forum.

Selected Projects: Past projects include Coping with Breast Cancer among Palestinian and Israeli Women (Project COPE); Development of Palestinian Lending Center for Medical Equipment; International Conference on Aging in the Mediterranean and the Middle East; Study of Israeli-Palestinian Cooperation in the Health Field, 1994-1998

Website: <http://www.jdc.org/>

Key Contact:

- Randi Garber – Director, JDC – Middle East Program. email: randig@jdc.org.il

Augusta Victoria Hospital

Description: The Augusta Victoria Hospital, a recipient of funding from the Lutheran World Federation, pro-

vides health services for Palestinian refugees in cooperation with the United Nations Relief and Works Agency (UNRWA). The hospital provides training programs for health professionals and has nine major medical departments. The Hospital is involved in numerous cooperative programs, including “Peace Through Health: Partnership in Emergency Medicine,” a trilateral program between Augusta Victoria Hospital, Hadassah Medical Organization, and Brigham and Women’s Hospital in Boston, Massachusetts.

Selected Projects: Hadassah-Augusta Victoria Hospital Exchange Program; Medilink - Training Palestinian Doctors in Israel; Peace through Health: Partnership in Emergency Medicine; Pediatric Hemato-Oncology Unit; Saving Children Project

Website: <http://www.avh.org/>

Key Contact:

- Dr. Tawfiq Nasser - Chief Executive Officer/ Director General, Augusta Victoria Hospital.
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Ben Gurion University

Description: Ben-Gurion University is a major center for education and research, with over 17,000 students enrolled in the faculties of Engineering Sciences, Health Sciences, Natural Sciences, Humanities and Social Sciences, the Guilford Glazer School of Business and Management and the Kreitman School of Advanced Graduate Studies. It also includes the National Institute for Biotechnology in the Negev, the Jacob Blaustein Institutes for Desert Research, the Albert Katz International School for Desert Studies and the Ben-Gurion Research Institute for the Study of Israel and Zionism. The University has campuses in Beer-Sheva, including the Marcus Family Campus, as well as in Sede Boqer and Eilat. The Faculty of Health Sciences includes the Health Sciences Graduate School, the Joyce and Irving Goldman Medical School, the Recanati School for Community Health Professions, the Medical School for International Health (in cooperation with Columbia University Medical Center), the School of Medical Laboratory Sciences, the School of Pharmacy, and the School of Continuing Education.

Selected Projects: Bedouin Genetic Research Project; Cerebral Palsy Collaboration; Child Nutrition in Israel and Palestine; Seeking Joint Initiatives

Website: <http://web.bgu.ac.il/Eng/Home/>

Key Contact:

- Sofer Shaul, M.D. – Dean, Faculty of Health Sciences, Ben-Gurion University.
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Canada International Scientific Exchange Program (CISEPO) and the Peter A. Silverman Centre for International Health

Description: The Canada International Scientific Exchange Program (CISEPO) works to build peace in the Middle East by promoting cooperation between health professionals and enriching exchanges in academic medicine, public health and health care. CISEPO was established in 1984, and began developing cooperative programs in health between Jordanians and Israelis in 1995; Palestinians joined the initiative in 1997. CISEPO, in conjunction with the American CISEPO (founded by Dr Robert Shprintzen of Upstate Medical University, Syracuse; Dr Gavin Setzen of Albany; and Dr. Dennis Bojrab and Dr. Shukri David of Detroit), has arranged for more than 2,500 Arabs and Israelis to meet in the Middle East through joint educational and research projects and public workshops. CISEPO also sponsors research and education initiatives, including continuing medical education exercises, joint planning meetings between heads of Palestinian, Israeli and Jordanian universities, and cooperative research projects between Israelis and Palestinians. The Peter A. Silverman Centre for International Health is located at the Mount Sinai Hospital in Toronto, Canada. The Center works through its CISEPO program to develop relationships between the hospital and global partners to build a “Network of Knowledge” for health and science. The Peter A. Silverman Center has trained more than 100 health professionals and students in Canada and internationally and brought more than 2,500 health professionals across borders to cooperate on health projects, including health professionals from the Middle East. Furthermore, the creation of the Peter A. Silverman Global eHealth Program (PASGeP) and the development of the Canadian Connection Collaboration provides eHealth programming for capacity building in Canada and the Middle East including Israel and the Palestinian Territories.

Selected Projects: Genetics Research Collaboration; International Network of Knowledge through Elec-

tronic Learning; Middle East Association for Managing Hearing Loss (MEHA); Middle East Association for Mother and Child Health (MEMCHA); Middle East Youth Smoking Website Cultural Adaptation Project; Student Summer Cooperative Program; Youth Voices M.E.

Website: <http://128.100.113.105/> and <http://www.mtsinai.on.ca/PASCIH/default.htm>

Key Contacts:

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- Ziad Abdeen, PhD, MPH – Palestinian Co-Director, CISEPO. email: zabdeen@planet.edu

Edith Wolfson Medical Center

Description: The Wolfson Medical Center is located in Holon on the Tel Aviv / Jaffa border and has over 60 departments and wards. The Wolfson Medical Center is an affiliate of the Sackler School of Medicine at the Tel Aviv University, and over 100 doctors employed by The Wolfson Medical Center also hold positions at the Tel Aviv Medical University in Tel Aviv, Israel. The Edith Wolfson Medical Center serves as the home for the Save a Child’s Heart program and many Canada International Scientific Exchange Programs (CISEPO) initiatives.

Selected Projects: International Network of Knowledge through Electronic Learning; Middle East Association for Managing Hearing Loss (MEHA); Middle East Association for Mother and Child Health (MEMCHA); Middle East Consortium on Infectious Disease Surveillance (MECIDS); Save a Child’s Heart; Student Summer Cooperative Program

Website: <http://www.wolfson.org.il>

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- Simon Fisher, Adv. - Executive Director, Save a Child’s Heart.
email: director@saveachildsheart.org

Emek Medical Center

Description: Known as an Israeli “hospital of peace,” Emek Medical Center is located in the city of Afula in Northern Israel. It is a community hospital with Arab and Jewish staff that serves a culturally rich population equally divided between Jews and Arabs. Emek Medical Center treats any person arriving at its entrance who needs help – whether they are an Israeli Jew, Arab, Christian, Druze or Palestinian. At the height of violence several years ago, Emek Medical Center treated hundreds of Palestinian men, women and children. Prior to the outbreak of violence in 2000, Emek was involved with the Jenin Hospital exploring ways to incorporate Palestinian children into a health care network. It has hosted day-long seminars for health care and hospital officials from the Palestinian territories. The hospital also conducts exchanges with American institutions, such as The Miriam Hospital of Brown University and emergency medical teams from California. Given Emek’s expertise in trauma care, these exchanges often focus on emergency medicine and disaster preparedness.

Selected Projects: Coexistence through Medicine; Treatment of Palestinian patients

Website:

<http://www.clalit.org.il/haemek/defaultEng.asp>

Key Contact:

- Dr. Larry Rich - Director of Development and International Public Relations, Emek Medical Center. email: rich_l@clalit.org.il

Hadassah Medical Organization

Description: Hadassah Medical Center in Jerusalem is the flagship of Hadassah, the Women’s Zionist Organization of America. A leading teaching hospital and research institution, the Medical Center includes two university hospitals and five health professional schools operated in cooperation with Hebrew University. Hadassah health professionals have participated in numerous peace-building cooperative programs with Palestinian health care providers.

Selected Projects: Advanced Resuscitation Training; Dermatology for Peace; Hadassah-Augusta Victoria Hospital Exchange Program; Hadassah – St. John Eye Hospital Human Resources Development Program in Ophthalmology; International Conference on Aging in the Mediterranean and the Middle East; International Congress on Chronic

Disorders in Children; Master of Public Health Course at the Braun School of Public Health; Medilink - Training Palestinian Doctors in Israel; Middle East Symposium on Dental Medicine; Fellowship Program for Palestinian physicians; Peace through Health: Partnership in Emergency Medicine; Pediatric Hemato-Oncology Unit; Saving Children; Specialist Graduate Training; The Trauma Course

Website: <http://www.hadassah.org.il/English>

Key Contact:

- Ron Krumer - Director of External Affairs, Hadassah Medical Organization. email: ron@hadassah.org.il

Healing Across the Divides

Description: Healing Across the Divides assists Israeli and Palestinian health care organizations in implementing bridge building programs that improve the health of both Israelis and Palestinians within a community based framework. The organization has sponsored initiatives related to diabetes monitoring and treatment, breast cancer screening and treatment, and the challenge of dual loyalty (simultaneous obligations to patients and the state) among physicians. Healing Across the Divides has worked with numerous organizations in Israel and the Palestinian Territories. Rather than support direct cooperative work, in each of its initiatives, Healing Across the Divides funds at least one Israeli and one Palestinian community-based organization, providing varied opportunities for them to interact as appropriate.

Selected Projects: A Diabetes and Hypertension Monitoring and Treatment System in Disadvantaged Israeli and Palestinian Communities; Breast Cancer Project; and Dual Loyalty Project

Website: <http://www.healingdivides.org/>

Key Contact:

- Norbert Goldfield, MD - Executive Director, Healing Across the Divides. email: norbert@healingdivides.org

Peres Center for Peace

Description: The Peres Center for Peace is an independent, non-profit, non-partisan, non-governmental organization founded in 1996 by Shimon Peres, Nobel Peace Laureate and the current President of Israel. The

Peres Center for Peace aims to further Shimon Peres' vision of building peace through socio-economic cooperation, development initiatives, and people-to-people interaction. The Center has also been actively involved in supporting Palestinian physicians training in Israeli hospitals. Initiatives include the "Peace for Sight" program (a three year initiative to train Palestinian ophthalmologists, carried out in partnership with St. John Eye Hospital in East Jerusalem and Hadassah Medical Center in Israel supported by the U.S. State Department) and Bridging the Gap (a two year program of monthly meetings of Palestinian and Israeli pediatricians, carried out in partnership with Makassed Islamic Hospital, Augusta Victoria Hospital in Jerusalem, the Palestinian Red Crescent Society Hospital and the Pediatric Department at Hadassah Medical Center at Mt. Scopus in Israel).

Selected Projects: Medilink - Training Palestinian Doctors in Israel; Palestinian-Israel Mental Health Students Working Group; Peace of Mind Initiative; Pediatric Hemato-Oncology Unit; Saving Children; Umbilical Cord Blood Banking Initiative

Website: <http://www.peres-center.org/>

Physicians for Human Rights – Israel

Description: Physicians for Human Rights—Israel was founded in 1988 with the goal of advancing human rights, in particular the right to health, in Israel and the Palestinian Territories. Physicians for Human Rights conducts activities that integrate advocacy and action to enact policies to improve health and enhance provision of health care. Physicians for Human Rights-Israel has more than 1150 members, over half of whom are health care providers. Currently, the organization is overseeing several projects in both Israel and the Palestinian Territories, as well as running a mobile health clinic in the Palestinian Territories and a clinic in Tel Aviv.

Selected Projects: Managing several projects in Israel and the Palestinian Territories, including a mobile health clinic in the Palestinian Territories and a clinic in Tel Aviv.

Website: <http://phr.org.il/phr/>

Key Contact:

- Dr. Ruchama Marton - President and Founder, Physicians for Human Rights, Israel.
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Rambam Health Care Campus (RHCC)

Description: Rambam Health Care Campus (RHCC), established in 1938, is the largest medical center in northern Israel. The medical center comprises 36 departments with some 1000 beds, 45 medical units, 9 institutes, 6 laboratories and 30 administrative and maintenance departments. It also includes the Meyer Children's Hospital. Some of the RHCC departments, are the exclusive providers of comprehensive services for all of northern Israel, including trauma treatment, oncology, and neurosurgery. As an academic hospital, RHCC maintains teaching and research links with the Technion's Rappaport Faculty of Medicine, providing a clinical environment for diagnosis, treatment and research. Rambam Medical Center physicians treat Palestinian patients and also train Palestinian physicians, receiving financial support for these training programs in large part from the Peres Center and the Middle East Cancer Consortium

Selected Projects: Medilink - Training Palestinian Doctors in Israel; Middle East Cancer Consortium

Website: <http://www.rambam.org.il/Home+Page/>

St. John's Eye Hospital

Description: St. John's Eye Hospital is the chief provider of expert eye care in the West Bank, Gaza and East Jerusalem. The Hospital is renowned for its teaching programs that are closely linked with Hadassah Medical Center and Al-Quds University Medical School. Additionally, the hospital operates three community health centers, a health clinic in the Gaza strip, and mobile outreach teams targeting isolated communities. The hospital is committed to its goal of Vision 2020 that aims to eliminate the main causes of preventable blindness as well as to implement affordable eye care programs.

Selected Projects: Hadassah – St. John Eye Hospital Human Resources Development Program in Ophthalmology; Medilink - Training Palestinian Doctors in Israel

Website: <http://www.stjohnseyehospital.org/>

Key Contact:

- Dr. Jeanne Garth - Medical Director, St. Johns Eye Hospital. email: meddir@sjeh.org

Tel Aviv University/Tel Aviv Sourasky Medical Center

Description: Tel Aviv University is the largest university in Israel as well as the largest Jewish university in the world. It is a major center for teaching and research, comprising nine faculties, 106 departments, and 90 research institutes. The Sackler Faculty of Medicine is Israel's largest institute of higher medical education, and includes the School of Medicine, the School of Continuing Medical Education, the School of Dental Medicine, the Stanley Steyer School of Health Professions, the Dr. Miriam and Sheldon G. Adelson Graduate School of Medicine, the Goldschleger School of Dental Medicine, and the School of Public Health. Faculty from Tel Aviv University and the Sackler Faculty of Medicine have been involved in numerous joint research and training projects with their Palestinian counterparts.

Selected Projects: Child Nutrition in Israel and Palestine: Seeking Joint Initiatives; Empowerment and Resilience in Children Everywhere (ERICE); Genetic Research Collaboration; International Network of Knowledge through Electronic Learning; Middle East Association for Managing Hearing Loss (MEHA); Middle East Association for Mother and Child Health (MEMCHA); Middle East Consortium on Infectious Disease Surveillance (MECIDS); Student Summer Cooperative Program

Website: <http://www.tau.ac.il/>

Key Contact:

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Conclusion

The health and medical fields provide special opportunities for building bridges between societies. Whether through prevention programs, the delivery of health services, or conducting research, the quest to improve health facilitates cooperation between health care professionals and patients from across the region. Health care providers in Palestine and Israel who work together do not simply deliver care and prevent illness. They have taken on a role as health diplomats, building bridges between these two societies, creating venues for cooperation, and laying the seeds for a peaceful future in the region.

The need to treat and prevent diseases and epidemics of common concern in the region has necessitated cooperation in the health field between Palestinian and Israeli scientists, clinicians, and public health practitioners for decades. The political climate has presented many challenges to the operation and sustainability of cooperative programs. Nevertheless, a significant group of individuals and organizations from both sides of the border remain committed to continuing to work together. Their cooperation serves as a vehicle for strengthening health systems, improving the health status of people in the region, and creating the professional and personal relationships that build trust and create peaceful ties between the societies.

The goal of the Palestine/Israel Health Initiative has been to foster cooperation and facilitate interaction between health and medical experts in Palestine and Israel to improve the health of people in the region as well as to promote increased cooperation and understanding. During the winter and spring of 2008, the Palestine/Israel Health Initiative (supported by the Center for the Study of the Presidency in Washington, D.C.), convened meetings in Israel, the West Bank, East Jerusalem, and the United States that brought together Palestinian, Israeli, and U.S. health experts to discuss areas of common concern and priorities for advancing health in this region. Meetings culminated in two days of Working Group sessions in East Jerusalem, where over fifty participants gathered to share insights, knowledge, and experiences. The meetings included representatives from the Ministries of Health, the NGO community, the World Health Organization, USAID,

academia and the private sector as well as physicians, public health practitioners, and nurses from Palestine, Israel, and the United States. Working groups produced joint recommendations for advancing cooperation between Palestinians and Israelis in the fields of health education and training, primary care and prevention, emergency medicine and disaster preparedness, medical research, and the application of information technology to improve health.

Another product of the Initiative has been to begin a mapping of the programs and organizations involved in Palestinian-Israeli health cooperative activities. Few studies have been conducted in recent years to identify such initiatives. This has impeded investment in and growth of these activities as well as networking between those involved. The Initiative consequently produced a Selected Inventory of ongoing cooperative activities between Israelis and Palestinians working to improve health in the region. The creation of the Selected Inventory included in this report has revealed over forty programs and thousands of individuals committed to working together across borders to advance the health of people in Palestine and Israel. It illustrates the importance and necessity of the work that these programs accomplish. The Selected Inventory provides an important lens into the inspiring daily interactions that occur, often below the radar, between people who believe that the need to heal transcends politics and the need to advance health knows no borders.

The process of convening meetings between health professionals in Palestine and Israel, however, was often challenging. Political tensions, border crossing issues, and funding constraints all created obstacles to bringing together Palestinian and Israeli health and medical experts over the course of this Initiative, despite their commitment and willingness to attend joint meetings, collaborate, and expand opportunities to work together. Furthermore, sustaining cooperation and communication after the conclusion of meetings is a problem faced by most initiatives and a particular problem in this region where tensions can restrict communication and mobility. Given these constraints in the region, a new paradigm for connecting health profes-

sionals and patients is required, facilitating greater interaction that is immunized from geopolitical divides. In the Information Age, the Internet and new media can enable communication and engagement when meaningful interaction would otherwise be impossible, connecting large numbers of people despite the challenges of geography, distance, and time.

A critical insight of the Palestine/Israel Health Initiative has been that information technology and new media *can* be a vehicle to successfully enhance cooperative activities in health and medicine globally, and specifically between Palestinians and Israelis, both by facilitating dialogue and communication and aiding in public health and service delivery. The creation of the PIHI “Health e-Commons” Internet workspace over the course of the Initiative has allowed the health and medical experts involved in this initiative to convene online to share best practices, health information, and data through the Internet. The space connects Palestinian, Israeli, and U.S. participants in the PIHI Working Groups for continuing cooperation to share insights, best practices, and applications of information technology to facilitate cooperation.

The “Health e-Commons” enables its membership to maintain dialogue, interaction, and information sharing as well as to access resources of mutual benefit between and beyond meetings. This online networking site helps sustain dialogue between meetings as well as to grow communities. The Initiative is also establishing a public health information portal for sharing health information and best practices in the region, with resources in Hebrew, Arabic, and English. Both the online workspace and public health portal are cre-

ative tools that can help to ensure the strong and sustainable future for cooperative activities in the area as well as to increase knowledge and awareness of health issues in the region.

It is hoped that by promoting cooperative activities in health and medicine, the products of the CSP Palestine/Israel Health Initiative will make meaningful contributions to the continuing process of building trust and reconciliation, paving the way toward a more peaceful future in the region. In many ways, health care professionals in this area of our world have taken on a new role in addition to their traditional duties to cure and prevent illness. This special role of “peace promotion” through health is a vital function that physicians, public health practitioners, and other health care providers play when working in areas of conflict. Cooperative activities between Palestinian and Israeli medical professionals are necessary both to improving health and serving the broader social function of building a peaceful future for this region.

The words of President John F. Kennedy remind us why this agenda is so important: “Our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children’s future.” The common quest for good health knows no borders. Crossing societies, politics and cultures, the cooperative activities supported by the CSP Palestine/Israel Health Initiative are helping to foster increasing interdependence and interconnections in the region and its shared humanity through the advancement of health.⁴⁰

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Rear Admiral Susan J. Blumenthal, M.D., M.P.A. (ret.) serves as Director of the Health and Medicine Program at the Center for the Study of the Presidency (CSP). She is also Director of the Palestine/Israel Health Initiative, a critical component of a program to advance trust and reconciliation in Palestine and Israel that was initially supported by a planning grant from USAID. Dr. Blumenthal is the Founder of the initiative's website *MiddleEast-Health.org*. She is a Clinical Professor at Georgetown and Tufts University Schools of Medicine, and Chair of the Global Health Program at the Meridian International Center. For more than 20 years, Dr. Blumenthal served in senior leadership positions in the U.S. Federal government as Assistant Surgeon General of the United States, as the first Deputy Assistant Secretary of Women's Health, as a White House advisor on health issues, as Senior Global Health Advisor where she established a Middle East Health Initiative, and as a research branch chief at the National Institutes of Health. She has been a pioneer in bringing major public health issues including global health, women's health, and disease and violence prevention to increased public and scientific attention. Dr. Blumenthal has been at the forefront of harnessing information technology to improve health, having designed and implemented several award-winning U.S federal government health websites. She has chaired many committees, conferences and commissions, published widely in the scientific literature, served as the health columnist for magazines and as Medical Director for an acclaimed television series on health. Admiral Blumenthal has received numerous awards including honorary doctorates and has been decorated with the highest medals of the U.S. Public Health Service for her national leadership and landmark contributions to improving health in the United States and worldwide.

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Stephanie Safdi serves as the Project Manager for the Center for the Study of the Presidency's Palestine/Israel Health Initiative, a key component of a program to build trust and reconciliation in Palestine and Israel initially supported by a planning grant from USAID. In 2005, Stephanie graduated summa cum laude with a Bachelor of Arts from Harvard University, with a concentration in History and Literature. Her undergraduate thesis won the Hoopes Prize, the highest university prize for an undergraduate thesis, the Ethnic Studies prize for the best Harvard thesis related to ethnic studies, and the University prize for best History and Literature thesis. She was awarded the Harvard-Cambridge scholarship to spend a year studying at Cambridge University in England, where she completed a Masters of Philosophy in Historical Studies. She subsequently completed a post-baccalaureate fellowship at the Harvard Initiative for Global Health, where she researched global health issues, with a focus on quality, access, and financing of health care in the United States and abroad. Stephanie Safdi is a 2008/2009 Fulbright Fellow in Israel, sponsored by Ben Gurion University of the Negev, where she is working on public health outreach to communities in the region as well as providing leadership for the Palestine/Israel Health Initiative.

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