

Russia

Back to mother Russia

American and Israeli Jews Return to their Roots

The following are interviews with Dr. Burt Appel and Dr. Bernard Kabakow, both of whom accompanied Israeli doctors to provinces of the former Soviet Union, where they lectured and offered consultation. After a couple of days of orientation in Israel, they spent about a week at their respective destinations.

Dr. Appel's destination was Odessa, one of the major cities of the Ukraine. Dr. Kabakow went to Minsk, the capital of Belorussia. Dr. Appel is a pediatric oncologist with Hackensack University Medical Center in Hackensack, N.J. Dr. Kabakow is an oncologist and a clinical professor at Albert Einstein Medical College of New York

Interview with Dr. Appel

JMJ: What were the conditions like and what is the work for doctors like in Odessa?

Dr. Appel: Basically, the goal of these missions is not to see as many patients as possible in the week and provide direct care. Because it's a concern—let's say you diagnose something and you leave in a week. There's no follow up. So the primary goals of these missions is to give lectures to doctors and nurses about either topics they ask for lectures about or things that you know about. That is one big goal. The other is to provide consultations in conjunction with local doctors.

So for instance, there is another pediatrician who went with me. There were two of us. And so for several mornings or afternoons, we went to either a children's hospital facility or to a school, and we saw patients in conjunction with local doctors to give them advice about how to treat difficult cases.

In terms of what the level of healthcare is, I think it is variable. I think there is a fair amount of western style, western standard treatment available, but it's not available for the average person. It is very expensive.

We didn't actually see what the conditions are like in the local pediatric clinic. We wanted to see them, but a lot of things in the former

Soviet Union is like, you go where they want to go. And you can't just say, hi I'm an American doctor and I am here to help. You see what they want you to see.

JMJ: So what kind of facilities were you in?

Dr. Appel: Well, we were in a very nice children's rehabilitation hospital one day that had pretty modern facilities. We were in a school where we did consultations and some things made sense to us—some things made no sense to us, in terms of what the local doctors were doing.

And it was clear that over the decades in which the Soviet Union was sort of isolated from western medicine, different trains of thought had developed. That was maybe our biggest difficulty or challenge, coming up with a common vocabulary with the local doctors, because things had developed very differently.

Most of the world uses English language textbooks or certainly English journal articles, in terms of real medical research. Most of these people, most of these local doctors don't speak or read English, don't have access to the Internet, so it is very hard for them to really learn up-to-date techniques, let alone have the equipment, the technology that we have. And that is a difficulty in providing state-of-the-art care in any developing country, because so much of medicine nowadays is not just based on a physical exam, but is based on very sophisticated laboratory tests and x-ray tests. And if you don't have the right equipment and people who can interpret the tests, the gap between American medicine and medicine in the former Soviet Union is just going to widen, because so much of what we do is technology based.

Finding a language

Dr. Appel: The biggest challenge was to try to think about patients in a way that made sense to us and made sense to the local doctors without insulting them.

JMJ: Some of their diagnoses were so foreign to you that they just seemed absurd or ridiculous to you?

Dr. Appel: That's right. And so instead of saying, "Oh, that makes no sense, you don't know what you are talking about," you have to say, "Well, that is very interesting, but in America this is how we approach this. Of course we know you don't have these tests available to you."

It is a challenge because these are obviously smart people who work hard and they are doing the best they can for their patients with the resources they have available. So you don't want to make it seem oh, American medicine is great and you are never going to have it. You want to say okay, well these are things you possi-

bly could do with the resources you have, and then maybe, hopefully, in the next five to 10 years you will have some of the resources that we have. Now of course, how are they going to get them? I don't know. But the way I look at it, the goal of this organization, JHI, which is still in it's first couple of years of existence, is to open a doorway.

And for many of these people, even if we gave them lectures that were totally beyond them, just the idea that American and Israeli doctors were interested in them, and interested in helping them, on some level was enough for them. They were very excited about that. And they hoped that this was going to keep building.

JMJ: Were there any situations where did you run into communication problems and had to smooth over feelings?

Dr. Appel: I was prepared enough that I didn't have to do that. I think the biggest problem in our group was with the dentists, because they actually went to local dental clinics. And this one dentist could not believe what she was seeing. And so she had, not confrontations, but difficult situations there. She couldn't really smile and say, oh, you are doing a great job there.

I think the main thing was diagnoses, where we just did not know what they meant. They clearly meant something to the local doctors, but they just didn't mean anything to us. And it was not a question of translation. We had some excellent translators.

JMJ: Were there any "old wives' tales"?

Dr. Appel: Yeah, there was a lot of folk medicine. There is a lot of what here we would consider complimentary or alternative medicine, people asking about magnet therapy, asking us to prescribe magnet therapy, and that kind of stuff.

Not the doctors so much, the patients, and that could happen anywhere. I think the main communication problem was not a question of language, because as I said, we really had excellent translators. It was more a question of understanding or not agreeing with diagnoses they were making.

The doctors had these diagnoses that ... I don't know. Kids who have headaches a lot, here we would do a CAT scan and we would say the kid is fine or the kid has migraines or the kid has emotional problems.

There were a number of kids who were diagnosed with "increased intracranial pressure." And in America that is a very specific thing that is a medical emergency that requires surgery.

JMJ: Like if a child is hit in the head by a baseball, and the child's brain swells and they have to release the pressure on the skull?

Dr. Appel: Right. So to us, that's what increased intracranial pressure means. It's a surgical emergency. We saw a number of kids who were healthy and going to school. They just had a lot of headaches and they had been given the diagnosis of increased intracranial pressure based on no real data. So that diagnosis obviously meant something different to the local doctors, and it was difficult to explain to them that we would have said that child is fine. But it's a problem because the parents now have this idea that oh, my child is very sick and needs this treatment, needs that treatment, when in reality the child was fine, by our standards.

JMJ: Did you see a specific kid and your sense was the kid was okay?

Dr. Appel: Yeah. We saw a few kids we thought just didn't want to go to school. We saw a kid who didn't want to wear their glasses. You know, that kind of stuff. That's normal pediatrics. But they came up with these diagnoses.

JMJ: Did you leave feeling you had accomplished something?

Dr. Appel: Well, yes in the sense that the people that we talked to, it seemed like it was a morale booster for them. And the reality is we are never going to know, because you never know any time you teach anyone anything, what type of impact it will make on them. This is an example, and I don't know if it is going to make any difference. One of the ways we treat asthma is with inhaled medicine, but the problem is children have trouble breathing the medicine in. So in America they sell plastic devices called spacers that sell for \$50 and they are sort of a bridge between the child's mouth and the little canister.

So I was talking to one of the doctors I work with and they said that they had read an article that was written by doctors from South Africa saying that you can make these spacers out of like a plastic Coke bottle. You just basically cut a hole in the bottom of the Coke bottle, attach the inhaler, and then the child puts their lips around the mouth of the bottle. You have to seal it with glue.

So I decided I was going to make one as a demo for them, and I bought a local Coke bottle and demonstrated this to them. And they were fascinated by this. So I thought if one of them goes back and starts using this idea then maybe it will help people. And that is like a simple, practical thing that can be done.

But you never know how much of an impact that you're having.

JMJ: So the Coke bottle, that's an example of the upside of your efforts, and the intracranial example, that shows the downside, how you were sometimes at loggerheads.

Dr. Appel: Right. I think the downside is there is a limit to how much

you can accomplish in a week. And I think for any large impact, you have to go there for an extended period of time and really see these doctors working. They have to come to your country and see you, and you are very limited by what you can do in a week.

And I think that is a way in which this differs from going to Turkey after an earthquake and helping people out of rubble, or going to South America and doing surgery for 12 hours a day. Then you know that you've accomplished something. This, you're sort of capturing a snapshot of a large thing. What people told us was that we were the ninth mission that went to Odessa. And the first couple, I mean, it was very hard, because they had no common context. Now they were kind of getting used to us, and we felt, okay, if each mission, each set of doctors, says the same thing, then maybe they will start thinking it. But it really is sort of a long term thing.

JMJ: How did you balance the goal of improving healthcare for Jews and the goal of improving healthcare for all? Were you going specifically and seeing Jews, or—

Dr. Appel: Well, in some situations we were. For instance, there was a gastroenterologist with us, and he saw patients in consultation at the JCC. And the presumption was those were Jewish patients. The overall goal is to benefit Jewish patients. But they know—like for instance, one of the reasons we went to this rehabilitation center is that then there is an understanding that maybe they will give a discount to Jewish patients, or some type of benefit for Jewish patients. So the goal of this organization is not to just say okay, we want to raise the standard of healthcare for everybody, even though that is a potential byproduct. If you go to a hospital and give a lecture to the doctors who are there, then hopefully the doctors will use that information for everybody. But if there were no Jews in the former Soviet Union, this organization would not be going there.

A few years ago I went to Africa with another organization called American Jewish World Service, and their goal was the opposite. Their goal was to go places where there were no Jews, and to show that Jews can help non-Jews.

I really like the JHI model, especially the idea of bringing American and Israeli doctors together. It was for me, and for a number of my group it was a very powerful experience in the sense that many of us, both the Israelis and the Americans had grandparents or great-grandparents who had come from Odessa, Kiev, etc. The bottom line is I really enjoyed the experience; everyone in my group did. I would go again if I had the time and could coordinate it. It was really a nice thing.

Interview with Dr. Kabakow

JMJ: What were activities in Minsk?

Dr. Kabakow: Essentially it was presenting lectures which lasted about two and half hours each, and answering questions and discussions with the doctors at the medical school, and other doctors in their specialties. The real purpose was teaching. And they were very anxious to learn. They are themselves what I would consider very good physicians, but they are lacking in equipment, they are lacking in access to some of the literature from the western countries, because they don't read English, very few of them read English, and most of the literature now is in English.

I went to the hospitals and I observed operations and saw some patients with the staff, as did the other doctors.

We were each given a list of lectures on topics that they were interested in, and then we were prepared lectures according to their wishes and their needs.

JMJ: What are the conditions there like?

Dr. Kabakow: The conditions there are, again, very good physicians, excellent nurses, great interest and compassion for the patients, but lacking some modern facilities and up-to-date antibiotics. Belorussia is a poor country with a very poor economy and very few resources, so they don't have the equipment we have in western Europe and the United States.

We were all four of us specialists so we saw those sectors of health care that encompassed our specialty, but we did not go out into the clinics in the city where [there was] primary care. We did not see those.

We had dinner meetings with various physicians who were concerned with the health administration of the province, of the country. We met with them, and that was how we got to know something about the general healthcare.

JMJ: What challenges did you confront?

Dr. Kabakow: Well, the biggest challenges for every one of us in going over there was we did not know what level of understanding in our given fields that the Russian physicians had. So I found that by lecturing and talking very slowly and giving a lot of time for questions I came to know at what level they are at. They know a lot but they don't have access to certain things which are innovative but which cost a great deal of money, like new anti-cancer drugs which are very expensive and which they don't have access. I found out that they were all highly educated, very very motivated. I left literature and they grabbed it up. They really wanted ... they had great interest in what we had to offer. And when I left

there I was asked to send over video tapes and literature in what interested them and I have compiled that and I will be sending it to Minsk for them. And they also wanted input from future physicians who would come over. They told their particular needs, what they really wanted to learn in addition to what we gave them. And we are trying to recruit other physicians to lecture them in the things that they are interested in. It is an ongoing thing, and I recruited some people who are going over next spring.

JMJ: How well were your translators able to serve you?

Dr. Kabakow: Excellent, because we gave them part of our talks and the slides beforehand and there is an institute of medical translation affiliated with the medical school in Minsk. And each one of us had excellent translators. The lady I had, I spoke two sentences, I stopped, she translated those two sentences, and then we went on. I read from the slide that was in the overhead projector, and she translated and it was almost perfect. You could tell by the questions that were asked later on. What they didn't understand they asked for explanations and after the two-hour lecture, in in-between times, during the breaks, questions were asked, they were translated to me, I replied in English and they were translated back into English. It worked itself out very well.

JMJ: How did you feel about the trip?

Dr. Kabakow: I was enthusiastic. All of us left on a high, because we were able to translate for them newer developments which hopefully they will encompass in their future treatments. They were just eager to learn. And the people who headed the institute were just extremely friendly and complimented all of us. We all left feeling we had contributed something and had helped the Jewish community. I can't tell you how good we felt about it. For myself also, my family comes from Minsk and I met a few of my cousins there and visited the town where my father was born and so forth. That was a side trip.

JMJ: Can you talk a little more about your follow-up since then?

Dr. Kabakow: What I did was for example in the field of the current therapy of liver cancer, I put our group who are doing this in New York in touch with the group who is doing this in the hospital in Minsk. So I've set up a communication between two groups of physicians 5,000 miles apart. They are now in touch. And when you do something like that, you feel you've accomplished something.

JMJ: What was JHI's position, and what were your feelings, regarding helping the Jewish community and helping non-Jews?

Dr. Kabakow: Our feelings as physicians is that we do not cater to any particular group. We cater to sick people; we treat sick people of any nationality. But for example, at the cancer institute—it was called the oncological institute, where I talked, the head of it knew where I came from, that I was Jewish, that I was sent by Jewish Healthcare International, and I was accompanied by somebody, a lady from JHI who knew the professor. Okay, so they knew that we were Jews and that we were there to educate, which they were enthusiastic about, and from what we understand there was a reciprocity that would help the remaining Jews in Minsk.

There is much less anti-Semitism than there was before the war and certainly when the Germans occupied Belorussia. That was the first part of Russia invaded after the Germans marched through Poland in '41. A good number of my family were killed, my uncle and cousins in the war. And in my father's hometown, which I visited, which was about 40 miles southwest of Minsk, there were 8,000 Jews before the war, there are 20 left. And I visited the war memorial where 2,000 Jews were murdered in my father's hometown, including my cousins. This is something which effected me greatly.

JMJ: So what was the personal incentive here for you, the personal mission?

Dr. Kabakow: Well, to return to my ancestral roots. We found out my family goes back—a cousin of mine researched the birth records—we back to 1720 in Minsk. To me it was a return to where my family originated.

And also we bonded. We visited with the Jewish elderly; we ate with them; we sang Hebrew and Yiddish songs together; we talked about our various backgrounds. We visited with the children. We visited the two synagogues in the city.

JMJ: Had you been concerned that the same prejudices your father had encountered would still be entrenched?

Dr. Kabakow: Yeah, we didn't know how much anti-Semitism there was, but it appears to be very little. First of all, there is a great deal of intermarriage. What is considered Jewish is to have one grandparent Jewish. Then they would fit into the quote "Jewish" community. In other words there is no exclusivity. They have helped people—which maybe the religious people in Israel and the United States would not call Jewish but who consider themselves in good part—they have helped such people.

We did not feel—for example, after every one of my lectures I was invited by the head of my institute to have drinks and cake and so forth. And we talked and there was no hint of any anti-Semitism. There was no tension. ■



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Israel
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BIO TERRORISM

ISRAEL IS PREPARED

ISRAEL'S HEALTH EXPERTS TALK ABOUT BEING READY

It's new to Americans, but it certainly is familiar to Israelis, inured to war and forced to defend themselves from threats near and far since the founding of the state. For some twenty years, hospitals around the country have routinely been conducting drills testing their staffs' preparedness for conventional and unconventional warfare.

This readiness has been in force especially since the attacks of Scud missiles hurled at Israel by order of Iraq's Saddam Hussein in the winter of 1990-1991. A bystander in the Persian Gulf War and pressed to sit quietly by then-President George Bush as the United States bombed Iraq, Israel made special preparations in the months before the Scud attacks: gas-mask kits, complete with an atropine syringe in the event of exposure to nerve gas. With trepidation, parents sent their children to kindergartens and schools, where emergency drills were practiced. Once the dozens of Scuds landed in Israel — fortunately killing only one person but causing significant physical damage in Ramat Gan and other areas — women who gave birth were not allowed to leave the hospital without taking a “mamat,” a plastic and aluminum tent to protect the infant during a missile attack.

Licensing exams for medical and nursing school graduates now regularly include questions regarding treatment of patients exposed to chemical-and biological-weapon attacks.

And terror has, sadly, become a part of daily life in Israel, especially during the last fifteen months, when some two hundred Israelis have been killed in suicide bomb attacks, shootings, and stabbings.

Then came September 11, when terrorists toppled the Twin Towers of Manhattan and a wing of the Pentagon—two major symbols of America's might. Israelis watched their TV sets in horror and disbelief. The sight of the smoke, fire, shocked faces, and body bags created a certain déjà vu feeling for them.

“The latest events of terrorism in the US have taught us that chemical and biological warfare, as well as the use of radiation weapons, could be used quite easily by fanatic and unscrupulous terrorist groups,” says professor Joshua Shemer, an internal medicine specialist, Director General of Maccabi Health Services (Israel's second-largest public-health maintenance organization) and former chief medical officer of the Israel Defense Forces. “Although the world's interest is targeted toward anthrax, one should also suspect and be alert to other non-conventional threats.”

Today, “the medical community faces a new era in medicine that

should be an integral part of common medical practice,” adds Shemer, who is also affiliated with the Israel Center for Technology Assessment in Healthcare at Sheba Hospital and with Tel Aviv University's Sackler Faculty of Medicine.

While the doctrine of management of conventional mass casualties is well known, he says, “clinicians and health service providers should be aware of the appearance of incidents ranging in dimensions, from sporadic cases to mass casualties of chemical, biological, and radiation warfare.” They should recognize the harm caused by the variety of non-conventional weapons as a potential epidemiology, and the relevant authorities should prepare for prevention and early detection.

“The principal triage in Israel for chemical mass-destruction weapons attack is conducted between walking and non-walking patients,” he continues. “Emphasis is placed on saving the lives of patients with milder injuries. Critically ill patients are to be provided with comfort measures (pain relief and sedation). Futile resuscitation efforts should be avoided in order not to utilize valuable equipment and personnel.” Hospital staffers are equipped with protective equipment including protective garments, air-filtered devices, chemical prophylaxis, vaccines, and antibiotics.

Among the biological threats for which hospital and civil-defense staffers have been trained are anthrax, bubonic plague, botulinum toxin, tularemia, Ebola, and smallpox; the chemical substances include organophosphate nerve gases, mustard gas, cyanide, and phosgene, while weapons involving radiation can cause biological damage. Recognizing the earliest signs is vital, says Shemer, as surveillance will enable health authorities and epidemiologists to get the quickest warning and decide what action to take.

Shemer, who spent part of the years 2000 and 2001 researching the Human Genome at the US National Institutes of Health and is well familiar with American society and medical care, gives them a lot of credit for their hurried but serious preparations after September 11. “It’s a big, well-oiled country with a lot of knowhow. The US did not need Israel’s help in digging up the World Trade Center rubble or our blood donations. It is also coping well with anthrax, and if such incidents continue, it will stop being scary. If you know what you’re doing and explain the problem well to the public, you greatly reduce the anxiety. Americans are behaving in a way that arouses respect. Israelis shouldn’t boast that we can teach Americans to do things better.” Still, he adds, Israeli experts are quietly sharing knowledge with Americans in vital fields.

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*Dr. Joshua Shemer,
former chief medical officer of
the Israel Defense Forces.*

Despite the fact that the US authorities have shown excellent coping and organization skills, September 11 was nevertheless a watershed for Americans. “Feeling safe and protected, invulnerable was a part of the culture, the essence of life for them,” says Shemer. “They can deal with earthquakes and other natural disasters, but this horrible experience shook their self-confidence. They had thought such a foreign assault would never happen to them. The Oklahoma disaster shocked them, but the government office building was brought down in an out-of-the-way place. It was not the center like New York and Washington.”

Israel, however, has had to cope so long with conventional war and with terror that envelopes with anthrax spores don’t unnerve them, he continues. When Shemer was deputy chief medical officer of the Israel Defense Forces during the Gulf War, he was “was pretty sure there would be anthrax spores on the tips of Saddam Hussein’s Scud missiles. Thankfully, there weren’t. But we in the military and medical establishment were very aware of the possibility. It’s odd that Israel did not get any anthrax envelopes so far. There were dozens of hoaxes here, but not the real thing.” The smallness of the country and the fact that nearly every professional has served in the army and continues until middle age to serve in the reserves promotes understanding and cooperation between the civilian and military sectors. This, Shemer maintains, “undoubtedly helps Israel prepare defend itself against unconventional warfare.”

Asked who he thinks is behind the anthrax envelopes in the US, Shemer says: “I personally think they’re connected to Muslim terror and not extreme right-wing groups. If the anthrax incidents had appeared on their own, they would not have caused such fear. But coming after September 11, the shock and fear were magnified.” But Americans have no need to run out and buy Israeli-made gas masks. “Gas masks are needed only in the event of missiles being launched with biochemical weapons as payloads. Unlike Israel, the US is not under threat of a missile attack.”

The likelihood of biochemical warfare against Israel might possibly be smaller than against the US because Israel is a small population, with Jews and Arabs, Palestinians and Israelis living close to one another. “Having Arab casualties would be embarrassing to Muslim fundamentalists, but we certainly cannot take this for granted as a deterrent.”

Shemer has warm praise for the US media, which did not broadcast

ghoulish images of mangled bodies and disconnected limbs being removed from the World Trade Center wreckage. “Here, our press has curiosity that is boundless and excessive and lacks self discipline.”

Professor Manfred Green, an epidemiologist at Tel Aviv University and founding director, since 1994, of the Health Ministry's Israel Center for Disease Control, says his agency has had teams of specialists involved in biodefense (defense against biological weapons) for more than a decade. Preparations, he says, had been put in place to some extent before the Gulf War, but they were put on a higher level of alert from then until now.

Green, who serves as a member of an advisory committee on dealing with biological warfare, says the list of disease-spreading agents has not changed for many years; only the delivery systems have been changed. “Our contingency plan is to take into account just about all the agents that are likely to be used.” A Scud missile, such as those that fell in various parts of Israel nearly eleven years ago, has the potential of spreading anthrax spores mostly in the limited area where the missile fell. “And then presumably it would be designed to disperse them as far as possible — but the actual dispersal would depend on wind conditions. During the Gulf War, Israel was prepared for other agents, but that anthrax was the most likely one.”

In Israel, the civilian population and the military are very closely inter-

linked. “On the one hand, most of us have served in the military. On the other hand, soldiers are treated in civilian hospitals, as we don't have any military hospitals,” Green says. “So there is a very close relationship. There is not a very clear distinction between the two sectors. So working in both of them or coordinating is relatively simple. I still serve in the reserves. Some of my consulting is actually in the military reserves. That means that we work together as one team.” Israeli health and defense officials have been unwilling to make clear statements about whether there is vaccine against smallpox to protect the citizenry in the event that this virus were to be used against them. Health Ministry officials have “frequently and recently discussed” the possibility of beginning local manufacture or the import of smallpox vaccine, but they are waiting for the defense authorities to decide whether there is any possible danger to Israel of smallpox spread by biological warfare. Ministry chief epidemiologist Dr. Paul Slater says that no one in the world — including Israel — has been vaccinated against smallpox since 1981, when the World Health Organization decided the infectious disease had been wiped out. “The government was very happy to stop giving the vaccine,” Slater adds. Only Israelis over the age of 20 who have been vaccinated have some protection against smallpox, the infection of which can be fatal. Adults who have been vaccinated before would not die from smallpox infection, but they could take ill. Middle-aged



Biodefense drill

and elderly people probably are most protected, because they have received several booster shots.

The vaccine — grown in eggs and made from a virus that is a “cousin of the lethal smallpox virus” — has not been manufactured for many years. The vaccine itself is “dirt cheap,” and stockpiles can be frozen for many years. But the vaccine should not be given to adults lightly, as it can cause side effects. “However, if there were a real risk of small-

pox as a biological weapon,” says Slater, “these side effects would not be a consideration and the authorities would decide that everybody gets it.”

It would take about six months to import or manufacture it before it became available for use, he said. A US company has begun producing smallpox vaccine by the tens of millions, and it could make five or six million more for Israelis, “but this decision depends on the defense authorities, who must decide if it's a realistic threat.” Danny Shoham, from the BESA Center for Strategic Studies at Bar-Ilan University in Ramat Gan, says

the protective steps taken for biological warfare are much more classified than against chemical weapons. “Biological attacks are much more enduring and therefore a more strategic weapon. Smallpox is highly contagious, antibiotics are not useful and the immunity is vanishing,” said Shoham, an expert in chemical and biological warfare in the Middle East. But Shoham believes that terrorists, who have shown they have no limits when attacking the US, would probably fear releasing biological agents like smallpox on Israel. “If smallpox were released, it could cause a horrible pandemic. It is terrorism's doomsday weapon. If Tel Aviv were to be contaminated, it would certainly pass on to the Palestinians and spread out to the neighboring countries,” Shoham hypothesizes.

Doctors in community health clinics, emergency rooms and hospital wards have been undergoing refresher briefings on preparedness in recent months, along with nurses, laboratory technicians and other frontline personnel, says Green. “Probably what is somewhat new is a closer relationship with the police. Although we have been developing over the past few years. But now for example we are working more closely with the police than we have before.”

The Health Ministry, which has for years been very poor at explaining diseases and promoting their prevention, learned a great deal from its mistakes in the year 2000, when 29 Israelis died and over 450 others were infected with West Nile virus. It took weeks before it disclosed the first death from the mosquito-borne disease. The almost-daily infection of more people caused panic in the public — much more anxiety than that posed by anthrax scares this year. In fact, the previous min-

istry spokesman was pushed out essentially because of his failure in dealing with West Nile virus information. Health journalists demanded to be informed about every new case, and the ministry yielded, offering information about how to avoid being bitten and working with the Environment Ministry to carry out pesticide spraying. The current holder of this post, Ido Hadari, has a health-information background, having previously served as spokesman of the Nahariya government hos-

pital in the north. His attitude is much more forthcoming, and his relationship with the press is much better than that of his predecessors in the ministry.

“I think our message to the public about anthrax and other biological weapons,” says Hadari, “is that you don't need to panic. There is no need for any kind of irrational behavior, but you should have a higher level of awareness, because that is the way you protect yourself. Even with daily threats of terror, you can't live forever closed in your home. And I under-

stand the Americans that they are now in great fear, because it is something new and not like conventional terror.”

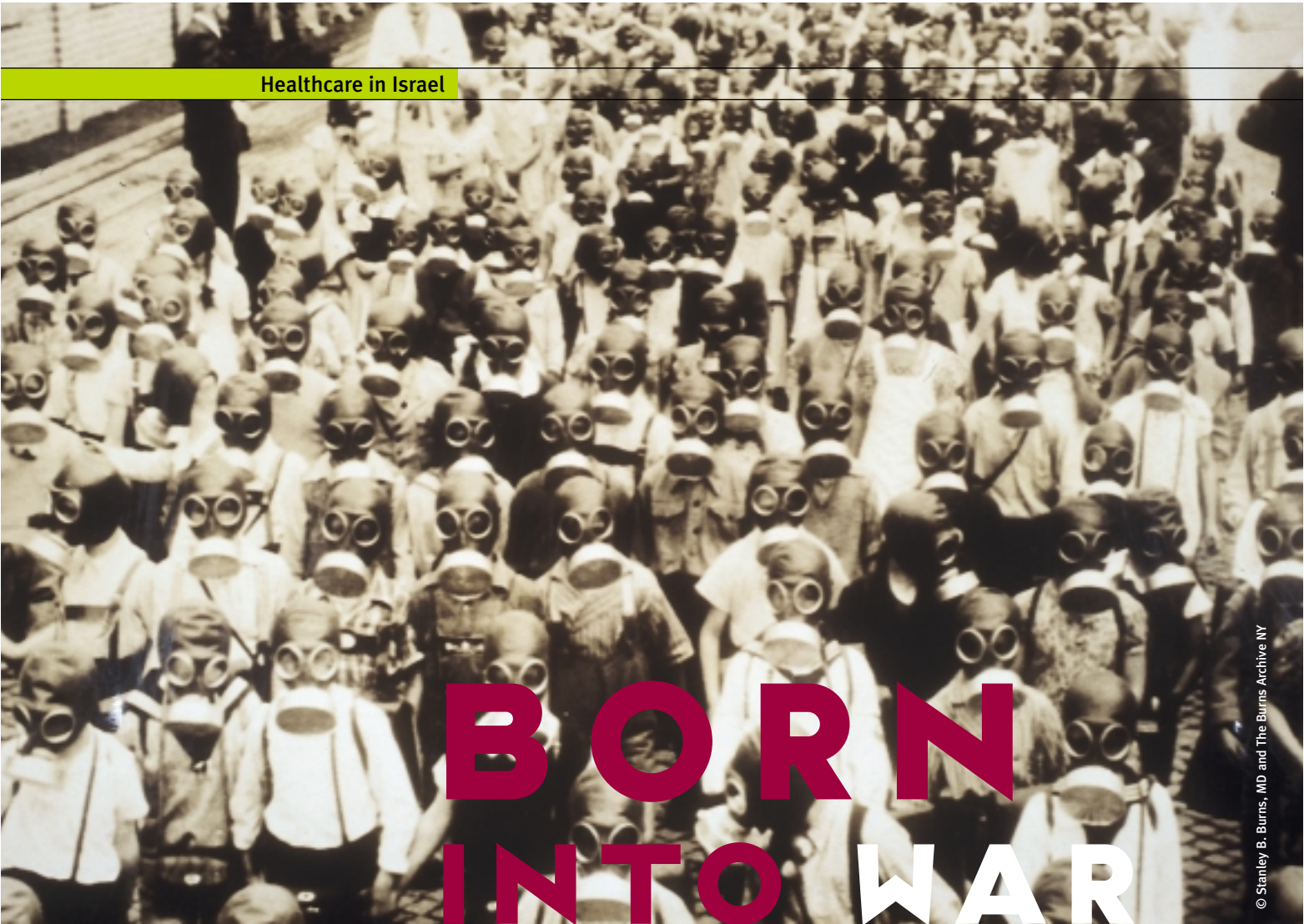
Terrorism, says Hadari, “is not sending a missile to a city. A missile harms a very small number of people, a few hundred or a few thousand, but it is not a major threat on the population or a country. Terrorism is hitting a few with suicide bombers but terrorizing all the rest of the population because they think it can also happen to them at any time.” The ministry spokesman continues: “My way of looking at the situation is that the whole public-health system might have to deal with maybe 10, maybe 100, maybe 10,000 people infected with anthrax. I would have to deal with 6.5 million people, not those infected but those who are panicked. We will not tell them not to worry. We will tell them that for the last few years, we have been intensively preparing for biological war. We are prepared. We have a big enough supply of equipment and drugs we might need. We are asking the people to be aware of any suspicious envelope. We want to turn fear into a positive element of being more alert.”

Israel, Hadari concludes, “has two advantages over our counterparts in the US. We got ready eleven years ago before the Gulf War, and secondly, we have a psychological advantage because we have become used to terrorism. Scary and enervating and painful as it is, we have managed to live with it.” ■

(with Julien Gorbach)

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BORN INTO WAR

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German schoolchildren undergoing gas drills in Berlin, 1939

JUDY SIEGEL DESCRIBES HER PERSONAL EXPERIENCE, GIVING BIRTH DURING SCUD ATTACKS

Labor and childbirth are scary and painful enough without having to go through them in wartime. And war is frightening enough without having to suffer through labor pains and delivery while wearing a gas mask. But I was one of about 8,000 Israeli women who had their babies during the Gulf War and survived that experience.

My son, Natan Hillel, who weighed a hardy 8.8 pounds at delivery, is now the tallest in his fifth-grade class, none the worse for being whisked half a dozen times after birth into an aluminum and plastic anti-gas tent until the Scud missiles stopped falling and the Americans defeated (but sadly did not declaw) Saddam Hussein's terror state. Now he watches TV reruns of

the Twin Towers collapse and shakes his head in horror, curses Osama bin Laden and wonders out loud whether the Middle East policies of the new President Bush will benefit Israel more than those of his father.

During the last six weeks of my pregnancy, in January 2001, the war began and the first Scud fell. Israelis had prepared by hoarding enough plastic sheeting to cover the entire Negev in transparent greenhouses and enough sticky tape to wrap up the planet Earth. Our home kitchen was turned into our private "sealed room." When the sirens sounded at night, we pulled the kids out of bed, sleepwalking, and plugged in a portable TV and telephone. We sealed the doors and windows with tape and pushed a wet floor-cleaning rag under the door to prevent any nasty nerve gases from entering. The first time during my pregnancy that a missile was fired at Israel and the gas masks had to be put on—by order of the Israel Defense

Forces spokesman on TV—I nearly choked to death. Somebody in the factory had left a black rubber plug in it, preventing any air from entering!

The baby was six days late, apparently feeling safer in the sealed womb than in the sealed room. I was scheduled to give birth at Jeusalem’s Misgav Ladach Hospital, whose large picture windows were covered with thick plastic sheets affixed with masking tape. Feeling insistent contractions, I insisted that my husband not leave the two older kids at home or even with a relative or friend: a missile attack could occur while we were away, and they might not get their masks on just right. So we gathered up their personal gas-mask kits and took them along to the hospital—the same kits for which I had sewed colorful cloth covers to make them a bit less frightening when they took them along with their schoolbags to class.

As Natan Hillel was a big baby, labor continued much longer than in my first two deliveries, and we finally relented, sending the kids to my brother’s home. Another siren went off and on went the gas masks—not only mine but also those of the midwife and doctors. The hospital director apologized to the women for their

discomfort as he made his rounds, admitting that the building felt more like a submarine than a hospital.

The siren sounded again the next day, and all the mothers pulled out their gas masks—an incongruous addition to their starched pink hospital gowns. Nurses rushed into the wards and efficiently wheeled breastfeeding infants to the nursery, instructing us calmly but firmly to remain where we were behind closed doors. They picked up each baby, pushing the beds one by one into the corridor and seal-



Israel’s baby and mother gas mask, December 2001

ing the newborns into protective plastic tents lying on the floor. And when an all-clear sounded, we raced back to the nursery as the staff were extricating the well-wrapped babies from their tents and matching the names on their wrist bracelets with those on the cards attached to the baby beds. When I found Natan Hillel — who was surprisingly

quiet despite the disruption — one of his bracelets had slipped off, apparently dislodging itself during the rush of the emergency.

I saw some Arab mothers from East Jerusalem looking alarmed until they were reunited with their babies. What, I wondered were they thinking? Were they silently cursing Saddam for threatening the lives of their babies?

Trying to get some sleep around midnight, we heard a man who had brought in his wife to deliver. “This is mad,” he shouted, “running about when missiles fall. I’m going to take her home and deliver her myself,” he threatened, but the nurses quickly calmed him down. The mothers returned to their babies, wondering whether the crazy ritual would be repeated again that night. Would the war pass soon, like some distressing but forgettable bad dream? Thankfully, none of those Scuds bore biological or chemical weapons.

But I never forgave the Iraqi tyrant for my son’s lack of enthusiasm for breastfeeding: having had to bottlefeed while in his tent, he found that less of an effort than nursing from me and gave up around the age of four months.

Saddam..... Taliban.... May you be rewarded by a crushing defeat. May your swords be turned into plowshares, and our babies’ anti-gas tents into greenhouses to make the desert verdant.



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British “Baby helmet” gas-mask, March 1939.

Israel R&D

SCIENTISTS BLOCK THE PROGRESSION OF TYPE 1 DIABETES



A team of researchers led by Prof. Irun Cohen of the Weizmann Institute of Science has developed a unique approach for halting the progression of Type I (juvenile or insulin-dependent) diabetes.

Cohen and Dr. Dana Elias (then a postdoctoral fellow at the Institute) discovered that injecting mice with a small peptide fragment known as p277 prevents the progression of Type I diabetes. Based on the results of his research, Peptor, a biopharmaceutical company from Rehovot, Israel, developed DiaPep277, an experimental drug designed to prevent or treat Type I diabetes.

A recent clinical study performed by researchers at Hadassah-Hebrew University Medical School, Peptor Ltd., and Prof. Cohen proved that DiaPep277 is successful in arresting the progression of Type I diabetes in newly diagnosed patients. The research findings are published in the November 24 issue of *The Lancet*.

The study was of thirty five patients newly diagnosed with Type I diabetes. Eighteen patients received injections of DiaPep277 at the beginning of the study, at one month, and at six months; seventeen patients received three injections of an inert substance (placebo). Patients in the treatment group (those receiving DiaPep277) showed a halt or delay in the

attack upon, or destruction of their pancreatic insulin-producing cells by the immune system. These results were evident in the level of the body's own insulin production and in a decreased need for insulin injections. The researchers were able to trace the mechanism of this improvement to changes in the patients' immune lymphocytes called T-cells. In contrast, patients receiving the placebo showed a significant decline in their natural insulin production and a persistent rise in the need for insulin injections. No significant side effects as a result of injecting DiaPep277 were found.

Recent data show that between 120 and 140 million people suffer from diabetes worldwide.

For the past several years, researchers at the Weizmann Institute's Department of Immunology led by Professor Cohen have been studying the mechanism by which the immune system destroys the insulin-producing pancreatic cells. Working with mice, the scientists discovered that a particular protein called HSP60 was closely linked to this destructive process. The protein acts like an antigen, prompting the immune cells to attack. Further investigation revealed that injecting sick mice with p277 — a small peptide fragment of the HSP60 protein — shut down the immune response, preventing the progression of Type I diabetes. "The peptide essentially acts to 'reeducate' the immune cells, switching off their destructive activity," Cohen explains. "The idea for using p277 stemmed from the discovery that the immune system has different options to choose from in responding to an antigen. It can act to destroy the antigen or alternatively protect it from destruction. In this case it indirectly prevents the pancreatic cells from being destroyed."

The scientists participating in this study are: Professor Itamar Raz and Dr. Muriel Metzger from Hadassah-Hebrew University Medical School, Dr. Dana Elias (now VP R&D at Peptor Ltd.), Dr. Ann Avron, and Dr. Merana Tamir from Peptor Ltd.

Donor support: The Robert Koch Minerva Center for Research in Autoimmune Disease, the Yeshaya Horowitz Association and Mr. and Mrs. Samuel Theodore Cohen of Chicago, IL.

Prof. Cohen is the incumbent of the Helen and Morris Mauerberger Professorial Chair in Immunology.