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How to Defuse Iran's Nuclear Threat

Bolster Diplomacy, Israeli Security, and the Iranian Citizenry

—By James Dobbins, Dalia Dassa Kaye, Alireza Nader, and Frederic Wehrey

Chance of a Generation: In an Aging Mexico, a Moment of Opportunity to Boost Social Security

—By Emma Aguila and Arie Kapteyn

Calls of Duty: America Weighs Its Obligations to Veterans and Their Families

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Message from the Editor

PHOTO BY DIANE BALDWIN

Good News Beneath the Surface

THE SPECTER OF WAR with Iran has haunted the news and editorial pages. The problem posed by the Iranian nuclear program is indeed very serious, but the rhetoric surrounding it is not always very illuminating. Slogans and appeals to emotion, while natural enough in any political discourse, are not always backed up with careful cost-benefit analyses and feasibility studies.

Our cover story, by James Dobbins and his colleagues, tries to apply those tools to this challenge. Without downplaying the dangers, the authors argue that there are alternatives to preemptive military action that are more likely to dissuade Iran from producing, testing, and deploying nuclear weapons, while also offering a better hope of promoting the eventual emergence of a more democratic and responsible Iranian regime.

Regarding this latter objective, “The best thing the United States can do to promote reform in Iran is to support the growth of democracy in those other Middle Eastern countries where the United States has greater access and influence,” the authors contend. “Adopting a regionwide and . . . globally consistent approach to democratization is important to establishing the credibility of U.S. support for reform in Iran. Employing this type of soft power could be decisive in the long run.” This is good, encouraging news amid a debate that is often disheartening.

Another source of unheralded, hopeful news emanates from south of the U.S. border. Like many countries, Mexico is facing the demographic and epidemiological challenge of providing financial security and adequate health care to millions of elderly citizens. Nonetheless, the country finds itself in an enviable position to avert a crisis. As Emma Aguila and Arie Kapteyn explain, “The present day offers a unique opportunity to reform and to adapt social security, saving, and health care policies before the largest generation in Mexico, born between 1980 and 2005, begins to retire in 2040.”

We are glad to bring these sources of promising news to the surface in this issue of *RAND Review*.

—John Godges

On the Cover

An Iranian worker stands beneath portraits of the late Iranian revolutionary founder Ayatollah Ruhollah Khomeini, right, and the current Supreme Leader Ayatollah Ali Khamenei, left, overlooking a production line at a carbon fiber factory in Tehran on August 27, 2011. Carbon fiber is a material under a United Nations embargo because of its potential use in Iran’s nuclear program.

AP IMAGES/ISNA/ABDOLVAHED MIRZAZADEH

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U.S. Military Has Struggled to Retain Afghan Popular Support Since 2006

Long before the public relations nightmares in Afghanistan of early 2012—a video of U.S. Marines urinating on Taliban corpses, deadly riots after U.S. personnel burned discarded Korans, and the suspected murder of 17 civilians by a troubled U.S. Army sergeant—the U.S. military campaign to gain popular support in the country had yielded mixed results.

According to a RAND study on the effectiveness of the U.S. military's information and psychological operations in Afghanistan between 2001 and 2010, U.S. efforts started to become less persuasive in 2006 as the Afghan public grew tired of foreign occupation.

"We found some specific operations that were very successful," said Arturo Muñoz, the RAND senior political scientist who authored the study. "However, there also are examples of opera-

tions that did not resonate with target audiences and even some that had counterproductive effects."

Psychological operations—efforts to use information to influence foreign audiences' beliefs and behaviors—had been used by the U.S. military in Afghanistan to gain popular acceptance for the overthrow of the Taliban government, the presence of foreign troops, and the creation of a democratic national government.

Messages reflecting the Afghan yearning for peace and progress were particularly effective initially, but became less so as Afghans became disillusioned with the Karzai regime and increasingly frustrated over the continuing fighting and lack of progress. The most notable shortcoming: the inability to sufficiently counter the Taliban propaganda campaign against U.S. and coalition forces regarding civilian casualties.

The biggest successes were in face-to-face communications. Meeting with local councils of elders, working with key leaders, and establishing individual relationships with members of the Afghan media all proved successful. Also effective: the concept of every infantryman being a psychological operations officer.

Afghan disappointment with the results of U.S. intervention did not translate into support for the Taliban, who remained very unpopular among most Afghans. U.S. efforts to highlight specific Taliban acts, such as destroying schools and killing schoolteachers, helped discredit the insurgency.

But even when the U.S. military took all the right steps, Muñoz said, its credibility was undercut by concern among Afghans in contested areas that their own government would be unable to protect them from a vengeful Taliban once U.S. and NATO forces left.

The U.S. military might improve information effectiveness, the study concluded, by asking personnel who served in Afghanistan to identify best practices, coordinating military information and public affairs operations, pre-testing messages with local focus groups, and relying on local leaders—clerics, chiefs, teachers—to disseminate messages. ■

For more information: *U.S. Military Information Operations in Afghanistan: Effectiveness of Psychological Operations 2001–2010*, RAND/MG-1060-MCIA, 2012, www.rand.org/t/MG1060

An Afghan youth mourns for relatives who were allegedly killed by a U.S. soldier in the Panjwai district of Kandahar Province, Afghanistan, on March 11, 2012. The soldier, now in U.S. custody, is accused of killing 17 Afghan civilians, including 9 children and 3 women, in their homes in the middle of the night and then burning some of their corpses.

AP IMAGES/ALLAUDDIN KHAN

Eliminating Individual Mandate Would Decrease Coverage, Increase Spending

If the individual mandate requiring all Americans to have health insurance were eliminated, it would sharply reduce the number of people gaining coverage and slightly increase the cost for those who do buy policies through the new insurance exchanges, according to a RAND study.

Utilizing the Comprehensive Assessment of Reform Efforts (COMPARE) model—a microsimulation model created by RAND—researchers showed that, in 2016, 27 million people would become newly insured with the mandate, compared with only 15 million without it, as reflected in panel A of the figure. The year 2016 is the first in which the Affordable Care Act will be fully implemented.

One concern about eliminating the mandate is that the insurance exchanges established under the Affordable Care Act would suffer from “adverse selection,” meaning that mostly sicker, higher-risk individuals would sign up for coverage, and that this could lead to greater spending per insured member, thus driving insurance premiums higher.

However, “Our analysis suggests that if the individual mandate is eliminated, premiums for people with policies bought through the exchanges will increase by only 2.4 percent,” said Christine Eibner, the study’s lead author and an economist at RAND. “These relatively modest premium increases will not be enough to trigger catastrophic failure of the exchanges—a ‘death spiral.’ Because of insurance subsidi-

dies, many enrollees will perceive little or no change in the amount of their contribution even when premiums increase.”

Total government spending would also increase slightly if the mandate were eliminated, caused by higher (sometimes subsidized) premiums, the loss of revenue from mandate penalties, and increased spending on care for the uninsured (panel B). But because so many low-income Americans would forgo coverage, the amount of government spending *per newly insured individual* would more than double, from \$3,659 to \$7,468 (panel C).

“The individual mandate is critical, not only to achieving near-universal health care coverage among Americans but also to yielding a high value in terms of federal spending to expand coverage,” Eibner said. “Without the individual mandate, taxpayers would have to spend more overall to insure a lot fewer people.” ■

For more information: *The Effect of the Affordable Care Act on Enrollment and Premiums, With and Without the Individual Mandate*, RAND/TR-1221-CMF, 2012, www.rand.org/t/TR1221

View the Video

Scan the code with your smartphone to watch RAND economist Christine Eibner discuss the ramifications of the individual mandate’s potential elimination.

Eliminating the Mandate Will Decrease the Number of Americans with Health Coverage and Increase Government Spending, Particularly for Newly Insured Enrollees

A. Without the Individual Mandate, 12.5 Million Fewer Americans Will Have Health Coverage Under the Affordable Care Act (ACA) in 2016

B. Removing the Individual Mandate Will Modestly Increase Total Government Spending Under the ACA in 2016

C. Removing the Individual Mandate Will Significantly Increase Government Spending Per Newly Insured Enrollee Under the ACA in 2016

Type of Legal Representation Affects Outcomes in Murder Cases

In theory, the verdicts and sentences in criminal cases should be determined only by the culpability of defendants—not by the legal representation they receive. But a RAND study looking at the outcomes for murder defendants who were represented either by public defenders or by appointed private counsel in Philadelphia shows that this is not always the case.

Since April 1993, every fifth murder defendant in Philadelphia has been assigned a public defender, while the other four have been assigned an appointed private counsel. In a forthcoming article in the *Yale Law Review*, RAND researchers compare the different outcomes of the two types of legal representation for criminal defendants.

“How much lawyers matter is often unclear, because lawyers and clients typically select one another, making it hard to separate out the effects of lawyers from other effects,” said James Anderson, the study’s lead author. “But we were

able to exploit a natural experiment in Philadelphia to measure the effect of lawyers in the most serious cases.”

Researchers isolated the effect of public defender representation versus appointed counsel representation in cases from 1994 to 2005. The differences in outcomes were striking, as shown in the figures. Compared with appointed private counsel, public defenders in Philadelphia reduced their clients’ murder conviction rate by 19 percent, their probability of receiving a life sentence by 62 percent, and their overall average time served by 24 percent.

To understand why such disparities exist, the researchers interviewed judges, public defenders, and the private attorneys who accepted the appointments. The researchers found that the appointed counsel in Philadelphia were impeded by extremely limited compensation, incentives created by that compensation, and conflicts of interest. Such factors presented obstacles to

the appointed counsel investigating and preparing cases as thoroughly as the public defenders could.

In one respect, Philadelphia represents a special case because of local institutional history that has resulted in both extremely low pay for appointed counsel and a specialized unit in the public defender office that was trained to handle murder cases. However, in another respect, the study points toward a bigger problem, because hybrid systems that use both public defenders and appointed counsel for indigent defense are common in the United States.

“The vast difference in outcomes in the cases examined in Philadelphia raises important questions about the adequacy and fairness of the criminal justice system,” said Paul Heaton, the study’s co-author. ■

For more information: *How Much Difference Does the Lawyer Make? The Effect of Defense Counsel on Murder Case Outcomes*, RAND/WR-870-NIJ, 2011, Web only: www.rand.org/t/WR870

In Philadelphia, Public Defenders Present a Stronger Defense

Regulatory Regime Key in Shaping Impact of Marijuana Legalization

Marijuana legalization will be on the ballot in at least two U.S. states in November 2012, and it is the subject of serious debate in a growing number of countries. When it comes to understanding the consequences of legalizing marijuana, the “devil is in the details of how the regulatory regime is designed,” according to a RAND study published in the journal *Addiction*.

Based on the analysis of two California proposals to legalize the production, distribution, and sale of marijuana to recreational users, researchers reached two principal insights: Marijuana legalization will dramatically reduce wholesale prices and lead to greater consumption; however, no one knows how much consumption will increase.

In the context of those insights, some key issues emerged regarding the design of regulatory regimes. “Most legalization proposals include a tax on marijuana to cover the costs of regulation and to raise revenue for more general purposes,” said Beau Kilmer, co-director of the RAND Drug Policy Research Center and a study co-author. “But given the large drop in wholesale prices, it is unrealistic to assume that excise taxes could keep marijuana prices at their current levels. If the tax is set too high, a black market for marijuana will still exist.”

Another issue to consider is marketing. An effort to restrict advertising to minimize marijuana use would be a challenge in the United States, where courts are often reluctant to limit corporate free speech. This makes it difficult

to allow commercial marijuana enterprises to operate legally without also permitting promotion.

Another design issue is the ability to amend whatever regulatory regime is put in place. “There is enough uncertainty about the demand curve for cannabis and how much tax evasion will occur, that predictions of the consequences of any specific regime will have large error bands,” said Jonathan Caulkins of Carnegie Mellon University, a study co-author. “If legalization happens, there will be

surprises and unintended consequences, which argue for building in an ability to make corrections.” ■

An effort to restrict advertising to minimize marijuana use would be a challenge in the United States, where courts are often reluctant to limit corporate free speech.

A New Nonpartisan Primer on Marijuana Legalization

Should marijuana be legalized? The latest Gallup poll reports that exactly half of Americans say “yes”; opinion couldn’t be more evenly divided. Co-authored by RAND Drug Policy Research Center Co-Director Beau Kilmer, *Marijuana Legalization: What Everyone Needs to Know* (Oxford University Press, June 2012) gives readers a nonpartisan primer on the topic. Kilmer is also one of the authors of a related RAND study published in the journal *Addiction*.

Getting Schooled

How the United States Ranks Among Other Countries in Educational Achievement

Andreas Schleicher, from the Organisation for Economic Co-operation and Development, said that all countries have socially disadvantaged students, but in countries such as Finland and China, where there is little variability among schools, the more disadvantaged students tend to be “more resilient.”

PHOTO BY DIANE BALDWIN

AS THE UNITED STATES debates how to improve its educational system, it is useful to remember that it is not alone. All nations confront challenges to improving their educational systems, and the Organisation for Economic Co-operation and Development (OECD) collects data on the efforts of many countries to improve outcomes for students. In particular, OECD conducts the Programme for International Student Assessment (PISA) to measure reading, math, and science skills of 15-year-olds around the world.

In a talk at RAND, Andreas Schleicher, the special adviser on education policy to OECD's Secretary-General, pointed to what drives high-performing educational systems and presented some comparisons from the 2009 PISA assessment of reading skills—focusing in on the United States.

Through a Global Lens

Schleicher started by comparing several countries in terms of the percentage of students who graduate from higher education institutions and the cost per graduating student, from 1995 to 2008. While the United States had the largest percentage of graduates in 1995 (35 percent), it also spent the most to obtain that result (\$18,000 per student). By comparison, Finland had a smaller percentage of graduates (22 percent), but it cost much less for each of them (\$12,000).

By 2008, all the countries had begun producing more graduates. Finland was number one, with 65 percent of its students graduating and its costs rising only marginally to \$15,000 per student. The United States had fallen behind, “not because completion in the United States had declined in absolute terms but because it had risen so much faster in other countries,” said Schleicher. By 2008, the United States also saw “costs per student escalating to around \$30,000 to get only a small percentage more graduates.”

Schleicher then turned from discussing the quantitative output of education systems to educational quality, by presenting the results of the PISA reading assessments of 15-year-olds from 2009. In this case, the United States ranked a little above the OECD average, but there was great variability across regions and between urban and suburban schools. “The United States is dragged down by having lots of students—18 percent—who are at very low levels of reading performance, compared with countries like Finland (6 percent) and Canada (8 percent).”

While 10 percent of U.S. students were high performers (around the OECD average in reading but below average in mathematics), Shanghai, China, had double that amount of high performers. “One of the surprising findings is how well Shanghai does,” said Schleicher. “The assumption is that it's

all about rote learning there, but you can't get high performance like that on the PISA test without demonstrating higher-order thinking skills and high levels of creativity in solving complex tasks."

Expensive Inequities

Schleicher discussed the impact of social background on student performance. "When you look at the distribution of student performance in each country, social background has an impact on student performance, but this impact varies considerably across countries. There are some countries where educational opportunities are very unequally distributed, where there is a large gap between winners and losers, and where a lot of the potential that children bring with them is wasted. And there are other countries where it matters much less into which social context students are born, where outcomes are distributed equitably."

All countries have socially disadvantaged students, but in countries such as Finland and China, where there is little variability among schools and where individual schools tend to have socioeconomically mixed student bodies, the more disadvantaged students in those schools tend to be "more resilient," said Schleicher. Socially disadvantaged students are deemed resilient if they perform better in reading than would be predicted from their socioeconomic backgrounds. In 2009, around 76 percent of socially disadvantaged students in Shanghai were resilient. Around 46 percent were resilient in Finland. But only around 29 percent were resilient in the United States.

The United States demonstrates average performance combined with large socioeconomic disparities. A number of places—such as South Korea, Finland, and Hong Kong and Shanghai, China—succeed in achieving higher levels of performance and social equity, which shows that "there is no obvious equity versus quality trade-off," argued Schleicher. "No country achieves the highest level of performance at the price of large disparities. Singapore is a good example of a school system that does quite well on performance but doesn't reach the top because of disparities."

Testing the Test

The performance of 15-year-olds on a test is one thing. The real question, as Schleicher pointed out, is "how much performance on the test is predictive of success in later life. The best way to find out is to actually watch what happens to students after they leave high school."

He showed the results for around 30,000 students in Canada who had been tested in reading at the age of 15 in the year 2000 and who had then been followed each year to track what choices they made and how successful they were in higher education and

work after high school. The results were adjusted statistically to make sure they were not simply a reflection of social background, gender, immigration, or school engagement.

The kids were measured in terms of where they were at ages 19 and 21, given how well they had performed on the PISA reading test at age 15. On the PISA reading test, students are classified at six levels, from below level 1 to level 5, with level 2 corresponding to basic reading skills.

"By age 19, kids who were at Level 2 were twice as likely as those below Level 1 to make a successful transition to the university; those at Level 3 were four times more likely; those at Level 4 were eight times more likely; and those at Level 5 were 60 times more likely." The results were even more striking at age 21, he said. "What this tells us is how important reliable measures of student performance are in predicting whether students move into successful lives down the road."

The Value of Money

How much money countries invest in education does affect student performance. But only 20 percent of the variation in student performance across countries is explained by spending per student. Much more important, according to Schleicher, is where the money goes. "In the United States," which spends more money on education per student than do other countries, "only about half the

money spent on education actually arrives in the classroom," he said. "And you can only expect money that arrives in the classroom to have a direct impact on learning."

Where the investment is made in the classroom also makes a difference. Schleicher compared a high-performing country, South Korea, with a lower-performing

one, Luxembourg. "Korea pays its teachers well, has long school days, and provides its teachers with lots of time for other things than teaching, such as teacher collaboration and professional development." But there is a trade-off for South Korea. "It finances all this by keeping classes large."

In contrast, in Luxembourg, which spends roughly the same per student as South Korea, "parents and teachers care mainly about small classes, so policymakers have invested mostly on reducing class size. To finance the small class sizes, school days are short, teacher salaries are average at best, and teachers have little time for anything else other than teaching."

In conclusion, said Schleicher, "Countries make quite different spending choices. But when you look at the data long enough, you see that many of the high-performing education systems tend to prioritize the quality of teachers over the size of classes." ■

How much **money** countries invest
in education does affect student performance.
But **much** more important is where
the money **goes**.

Chance of a Generation

In an Aging Mexico, a Moment of Opportunity to Boost Social Security

By Emma Aguila and Arie Kapteyn

RAND economist Emma Aguila is director of the RAND Center for Latin American Social Policy and a professor at the Pardee RAND Graduate School. RAND senior economist Arie Kapteyn is director of RAND Labor and Population and associate director of the Financial Literacy Center, a joint center of RAND, Dartmouth College, and the Wharton School.

Mexico is undergoing unprecedented demographic and epidemiological changes. The birthrate has declined markedly since 1960 and is expected to fall further in the decades to come. Advancements in living conditions, health care, and technology have raised life expectancy for the elderly,

resulting in a rapidly aging population. Infectious diseases have become less prevalent, while the chronic and degenerative diseases of old age have become far more so. The demographic and epidemiological transitions raise questions about the sustainability of the existing systems for providing financial security and health care for older people in Mexico.

The good news is that the present day offers a unique opportunity to reform and to adapt social security, saving, and health care policies before the largest generation in Mexico, born between 1980 and 2005, begins to retire in 2040. In a study sponsored by AARP, the RAND

Corporation, and Centro Fox, we surveyed the policy options.

A Country's Changing Face

While the fertility rate in Mexico has fallen from an average of 7 children per woman in 1960 to 2.1 in 2009, life expectancy at birth has risen from 36 in 1950 to 75.3 in 2008 and is predicted to reach 80 in 2050. As shown in the figure, the old-age dependency ratio (the number of people aged 65 years or older per 100 people aged 15 to 64) was just 8 in 2000, but it is expected to more than triple by 2050, reaching 30 and approaching that year's projected U.S. ratio of 34.

Although the increased life expectancy is a positive development for Mexico, a high proportion of the elderly population is poor. Mexico's overall poverty rate is 21 percent, but the rate rises to 29 percent among people who are 65 or older, according to the Organisation for Economic Co-operation and Development (OECD). The demographic transition in Mexico, combined with limited sources of formal retirement income, is leaving many older people financially insecure. Those living in rural areas are particularly vulnerable because they may lack the labor income and social security coverage of their urban peers. Older men are more at risk for poverty than are older women, possibly because older women are more likely to receive family support.

To enhance the income security and health status of the elderly in Mexico, the best policies include these six options: Extend the income safety net for older people, promote saving for retirement, extend the coverage of social security programs (which, in Mexico, provide health insurance coverage along with pension benefits), allow migrants to contribute to Mexican

Mexico's overall poverty rate is 21 percent, but the rate rises to 29 percent among people who are 65 or older.

Portraits of the elderly across Mexican states: a woman in a park, Zacatecas; a man on Janitzio island, Michoacán; a woman at Santa Prisca Cathedral in Taxco, Guerrero; a man in a Mexico City subway, Distrito Federal; a Mayan woman wearing a traditional huipil (blouse) near the Mayan ruins at Chichén Itzá, Yucatán; and a contemplative Mexican senior from an unknown location.

GETTY IMAGES (1ST, 2ND, 4TH, AND 6TH); ODYSSEY IMAGES (3RD AND 5TH).

social security while abroad, increase the financial literacy of Mexicans to help them plan for retirement, and establish a national agency to oversee the fragmented social security system.

Low Rates of Coverage

Several social security systems exist in Mexico, but there are gaps in coverage. The national coverage rates are low compared not only with other OECD countries but also with many other Latin American countries.

Private-sector workers whose employers register them with the government have their pensions and health care insurance covered by the Mexican Institute for Social Security (Instituto Mexicano del Seguro Social, or IMSS). In 2009, IMSS covered about 40 percent of the Mexican population. Employers are legally mandated to register their employees by enrolling them in IMSS, but enforcement of worker registration is uneven.

Government employees receive pension benefits and health care coverage from the Institute for Social Security and Services for State Workers (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, or ISSSTE). In 2009, ISSSTE covered about 6 percent of the population. The national petroleum company, the armed forces, and most Mexican state governments offer their employees separate social security programs, including pension and health care benefits.

The formal sector of the Mexican economy comprises all private-sector and government workers who make social security contributions, which are optional for the self-employed. The uninsured are therefore concentrated within the informal sector of the economy, which comprises the self-employed and other wage earners who do not make social security contributions.

Less than half the older Mexican population is covered by any social security system. Therefore, elderly Mexicans often continue working into old age. Between 2004 and 2009, Mexico stood out among

the 30 OECD countries for having the highest average effective retirement age for men, at 72.2, and the second-highest for women, at 69.5. In 2000, one in four men in Mexico still worked at age 80. In 2006, 46 percent of men and 15 percent of women aged 65 or older remained in the labor force.

Government-paid noncontributory pension programs were introduced in 2001 for the growing segment of the population that reaches retirement without social security coverage. A public health care program for the uninsured—Popular Health Insurance (Seguro Popular de Salud)—has also recently expanded substantially. However, as these safety net programs are not yet universal, income security and access to health care remain concerns for many older people.

Older people with health insurance in Mexico are more likely to find their health to be excellent, very good, or good compared with the uninsured (44 versus 33 percent) and are less prone to having strokes (2 versus 3 percent), arthritis (17 versus 23 percent), and limitations on activities of daily living (5 versus 9 percent). However, the insured are more likely to be

By 2050, Mexico's Old-Age Dependency Ratio Is Expected to Approach That of the United States

SOURCE: U.S. Census Bureau, International Data Base, 2012.

SUPERSTOCK

Two women chat along the sidewalk in San Miguel de Allende, located in the central Mexican state of Guanajuato.

diagnosed with diabetes (18 versus 13 percent) and to be obese (20 versus 13 percent).

Being a social security beneficiary in Mexico is also associated with an average annual reduction of out-of-pocket medical expenses of 860 pesos (\$106 U.S. dollars at the 2011 purchasing power parity exchange rate, which takes into account the amount of money needed to purchase goods and services in different countries). Some of the out-of-pocket costs are paid out of family transfers and remittances (family transfers that originate from a foreign country). The medical expenses for the elderly consist mainly of physician visits and outpatient procedures.

If Possible, Do All Six

We suggest six options for improving income security and health status for the elderly in Mexico.

First, extend the safety net for the elderly. Poverty alleviation policies for older people in Mexico consist mainly of conditional and unconditional cash transfer programs; in-kind transfers, such as food baskets and free meals; and access to health care services. Evidence suggests that in-kind transfers have had little or no beneficial impact, and there is no conclusive evidence on the programs that offer access to health care, the effectiveness of which often depends on the quality of care provided.

In contrast, a noncontributory pension program in the Mexican state of Yucatán, evaluated by RAND,

has shown many beneficial effects: People 70 years or older have made more doctor visits, purchased more prescriptions, and bought more food for the home, and some have stopped working. The greater use of health care might imply a higher investment in preventive medicine, potentially reducing government health care costs. One possible negative effect might be the partial or total substitution of family transfers by public spending (a crowding-out effect). But with falling birthrates, the role of family transfers will likely be reduced in the future, increasing the need for other sources of financial security in old age.

From Brazil to South Africa, noncontributory pension programs have shown consistently positive effects on the well-being of older people. They are easier to implement than in-kind transfer programs or those promoting access to health care, and they give older people more freedom to choose how best to use their cash benefits.

In Mexico, the federal government and many states have introduced noncontributory pensions with varying benefits and eligibility requirements. In the short run, one way to reduce poverty would be to extend such programs to the elderly nationwide. The benefits could be the same everywhere to avoid giving people incentives to relocate to states with more generous benefits. In the longer run, with a sharply increasing older population, a universal noncontributory pension scheme would put a heavy strain on federal and state budgets. One possibility would be to extend the existing programs in the short run while also ensuring that current workers save more today for their future pensions. In the longer run, noncontributory programs could then be phased out.

Second, promote saving for retirement. There are two main reasons why less than half the labor force in Mexico is covered by a social security system: ineffective enforcement in the formal sector and a high percentage of workers in the informal sector. Policies to raise retirement savings could include enhanced enforcement of social security registration for all workers in registered firms, greater incentives to delay retirement (higher monthly pensions for those who work beyond age 65), and mandatory enrollment in the public pension and health care system for the self-employed (as is done in Colombia and other Latin American countries). If social security is made mandatory for the self-employed, then enforcement should be enhanced for them as well.

The government and private organizations could also develop tax-deferred saving mechanisms and new retirement products, particularly for vulnerable groups, such as indigenous populations. Even sending text messages or letters reminding people to save has been found to increase total savings by around 6 percent in Bolivia, Peru, and the Philippines.

Third, extend health insurance coverage and promote preventive health care. Those with health insurance have better overall health and lower out-of-pocket health expenses. The most obvious policies would expand health insurance coverage for workers through expanded enrollment in social security (consistent with the above suggestions to expand public pension coverage).

Other policies could increase investments in preventive health care. This could be accomplished through increased enrollment among eligible families in Oportunidades, a conditional cash-transfer program that has been shown to raise rates of school attendance. Oportunidades also has a health component that requires regular check-ups for family members.

Fourth, integrate return migrants into the social security system. Migrant remittances are an important source of income for the elderly and are often used to pay for health care services. Yet returning migrants face health challenges of their own: They are more likely than others to suffer from arthritis and obesity, and their health care is less likely to be covered by social security.

Migrants could be allowed to contribute to the Mexican social security system while they are abroad so that they will be covered when they return. IMSS already offers a health insurance program that allows Mexicans working in the United States to purchase coverage for themselves and their families in Mexico (including parents, children, siblings, grandparents, and cousins), but the program does not cover preexisting conditions. IMSS could develop a policy that covers preexisting conditions for returning migrants, who often spend years abroad. For migrants who would qualify for Medicare if they remained in the United States, IMSS could also offer portability of Medicare benefits so that they could be used in Mexico.

Fifth, increase financial literacy to help Mexicans plan for retirement. Many Mexicans do not understand how to plan for retirement and how to organize their finances accordingly. One study in the United States has shown that standardizing the statements for all types of

retirement saving accounts while providing personalized information about pension benefits accrued to date (for those who have yet to retire) has increased knowledge about the U.S. social security system.

Sixth, establish a national social security agency and agenda. Establishing a national agency to oversee Mexico's fragmented social security system could improve policy across the country. The existing organizations operate at local, state, and national levels of government; they are run by different agencies; and there is no central body that coordinates the research and policy agendas. A national agency could monitor and then improve labor and pension policies nationwide. One model could be the United Kingdom's Department for Work and Pensions.

In Mexico today, formal pensions play a modest role in sustaining the income security and health status of the elderly, whereas informal mechanisms, such as family transfers or work at advanced ages, play the dominant roles. The demographic transition in Mexico, combined with the shift toward chronic and degenerative diseases, raises doubts about the sustainability of the informal mechanisms. The policy options presented here can help Mexico take advantage of its demographic window of opportunity to strengthen its social security systems for all. ■

Related Reading

Living Longer in Mexico: Income Security and Health, Emma Aguila, Claudia Diaz, Mary Manqing Fu, Arie Kapteyn, Ashley Pierson, RAND/MG-1179-CF/AARP, 2011, 123 pp., Web only: www.rand.org/t/MG1179

Living Longer in Mexico: Income Security and Health: Executive Summary, Emma Aguila, Claudia Diaz, Mary Manqing Fu, Arie Kapteyn, Ashley Pierson, RAND/MG-1179/1-CF/AARP, 2011, 12 pp., Web only: www.rand.org/t/MG1179z1

Living Longer in Mexico: Income Security and Health (Spanish-language version), Emma Aguila, Claudia Diaz, Mary Manqing Fu, Arie Kapteyn, Ashley Pierson, RAND/MG-1179/2-CF/AARP, 2011, 128 pp., Web only: www.rand.org/t/MG1179z2

Living Longer in Mexico: Income Security and Health: Executive Summary (Spanish-language version), Emma Aguila, Claudia Diaz, Mary Manqing Fu, Arie Kapteyn, Ashley Pierson, RAND/MG-1179/3-CF/AARP, 2011, 12 pp., Web only: www.rand.org/t/MG1179z3

Migrants could be allowed to contribute to the Mexican social security system while they are abroad so that they will be covered when they return.

Mexicans Work and Work, But Will Retirement Work for Them?

In a study sponsored by AARP, the RAND Corporation, and Centro Fox, RAND economists Emma Aguila and Arie Kapteyn surveyed the options for Mexican social security and health care policies. These illustrations highlight some of their findings about an aging Mexico.

MEXICO'S POPULATION IS RELATIVELY YOUNG TODAY, with a median age of 27, but it will age rapidly in coming years. From 2005 to 2050, the country's elderly population (those at least 65 years of age) is projected to increase 370 percent, more rapidly than that in the United States, Canada, and many other nations inside and outside Latin America.

SOURCE: U.S. Census Bureau, International Data Base, 2012.

THE POPULATION STRUCTURE of Mexico is changing dramatically. In 2005, the number of people 24 or younger was more than 50 million, while those 65 or older numbered 5 million. By 2050, the younger group is projected to narrow to fewer than 35 million, while the older group will bulge to more than 25 million.

BECAUSE OF COVERAGE GAPS in the Mexican pension system, many Mexicans must work until advanced ages. In 2001, about one-third of income for people in their 70s and nearly one-fifth for those who were 80 or older still came from wages, bonuses, or business income.

IN 2030, THE NUMBER OF MEXICANS at least 65 years old per 100 people of working age (15 to 64) will be highest in many central Mexican states. The number of people currently covered by social security also varies widely by state, suggesting the urgency of expanding coverage, particularly in states that will experience the demographic transition sooner than others.

In Broad Daylight

New Calculator Brings Crime Costs—and the Value of Police—Out of the Shadows

THE MANY **COSTS**
OF CRIME

CRIME COST AMERICANS MORE THAN
\$300 BILLION IN 2010

TANGIBLE

INTANGIBLE

LOST
PROPERTY

LOST QUALITY
OF LIFE

PATROLLING &
INVESTIGATION

LOST
PRODUCTIVITY

MEDICAL
TREATMENT

GENERAL FEAR

ADJUDICATION

LOST USE
OF COMMUNITY
SPACES

INCARCERATION

PSYCHOLOGICAL
EFFECTS

	cost per crime	number of incidents
Murder	\$9,081,677	14,748
Rape	\$228,572	84,767
Aggravated assault	\$91,694	778,901
Robbery	\$70,641	367,832
Burglary	\$13,751	2,159,878
Motor vehicle theft	\$9,533	737,142
Larceny	\$2,246	6,185,867

TOTAL

\$301,337,127,289

This calculation considers only the seven serious crimes classified by the FBI as "Part I" crimes and excludes the costs of unreported incidents. Thus, the total cost of crime in 2010 was probably much higher.

Crime inflicts a substantial toll on individuals, businesses, and communities. Understanding the total cost of crime—which includes costs related to lost quality of life, general fear, and other intangibles, in addition to the more obvious costs related to lost property, incarceration, and the like—can help cities decide how best to invest their crime-control dollars. RAND’s Cost of Crime Calculator lets city leaders and residents calculate the total cost of crime in their communities and assess the potential value of hiring additional police officers. The calculator can be found at <http://cqp.rand.org/cost-of-crime>.

SOURCES: *Hidden in Plain Sight: What Cost-of-Crime Research Can Tell Us About Investing in Police*, RAND/OP-279-ISEC, 2010, www.rand.org/t/OP279; Federal Bureau of Investigation, “Crime in the United States: 2010,” website, www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010.

THE **COST** OF CRIME TO RESIDENTS AND THE **VALUE** OF AN OFFICER

Infographic: Erin-Elizabeth Johnson (concept and data storytelling) • Carol Earnest (design)

How to Defuse Iran's Nuclear Threat

Bolster Diplomacy, Israeli Security, and the Iranian Citizenry

**By James Dobbins, Dalia Dassa Kaye,
Alireza Nader, and Frederic Wehrey**

Ambassador James Dobbins directs the RAND International Security and Defense Policy Center. Dalia Dassa Kaye is a RAND senior political scientist and a faculty member at the Pardee RAND Graduate School. Alireza Nader is a RAND senior international policy analyst focusing on Iranian political dynamics and foreign policy. Frederic Wehrey is a RAND senior policy analyst focusing on Persian Gulf security.

The prospect of a nuclear-armed Iran has stoked tensions around the world. We argue that diplomacy and economic sanctions are better suited than military action to prevent the emergence of a nuclear-armed Iran, that Israeli security will be best served by military restraint combined with greater U.S.-Israeli cooperation, and that the Iranian people offer the surest hope for a future Iran that is more amenable to U.S. interests.

An attack on Iranian nuclear facilities would make it more, not less, likely that the Iranian regime would decide to produce and deploy nuclear weapons.

An Israeli or American attack on Iranian nuclear facilities would make it more, not less, likely that the Iranian regime would decide to produce and deploy nuclear weapons. Such an attack would also make it more, not less, difficult to contain Iranian influence.

It is, after all, not Iranian *aggression* that its neighbors principally fear, but Iranian *subversion*. It is Iran's ability to appeal to potentially dissident elements within neighboring societies—to the Shia popula-

tions of Lebanon, Iraq, Saudi Arabia, and the Persian Gulf states, and to the more radical elements within Palestinian society—that is of most concern to these states. It is Iran's appeal throughout the Islamic Middle East as a bastion of anti-American and anti-Zionist activity that most disturbs other regional regimes. This is true even of Israel, whose principal vulnerability is not to Iranian military pressure but to attacks by Iranian-supported Hamas and Hezbollah.

Containing this sort of influence would almost certainly become more difficult in the aftermath of an unprovoked American or Israeli military attack. Reaction among neighboring populations would be almost uniformly hostile. The sympathy thereby aroused for Iran would make containment of Iranian influence much more difficult for Israel, for the United States, and for the Arab regimes currently allied with Washington. This would be particularly true in newly democratizing societies, such as Egypt, where public opinion has become less fettered and more influential. International sanctions would erode, and Iran would likely redouble its efforts to develop nuclear weapons.

At this late date, the proximate objective of Western policy must be to dissuade Iran from testing and deploying nuclear weapons. Doing so will require that Western officials go beyond declaring such a step unacceptable and rather begin to illustrate how crossing this threshold will only increase Iran's isolation, reduce its influence, and increase the regime's vulnerability to internally driven change. Making such warnings credible will require broad international solidarity in support of ever-tighter sanctions. Threats of military action, and even more its actual conduct, would have only the opposite effect: reducing Iran's isolation, increasing its influence, promoting domestic solidarity,

Iranian students pray in front of the Isfahan Uranium Conversion Facility in support of Iran's nuclear program on November 15, 2011.

AP IMAGES/VAHID SALEMI

and reinforcing the case for building and deploying nuclear weapons as soon as possible.

To prevent the rivalry between Israel and Iran from escalating into armed conflict, the United States should continue to discourage an Israeli military strike while strengthening Israeli capabilities in preparation for a future in which Iran may have managed to acquire nuclear weapons. U.S. leaders should bolster security cooperation and intelligence sharing with Israel while maintaining pressure on Iran, thus weakening its capacity to project power and fueling the debate within Iran over nuclear weapons.

A future Iranian regime may view Israel differently. Fundamentalists appear to have consolidated power since the 2009 Iranian presidential election, but the regime exhibits severe fractures and faces critical vulnerabilities. The potential emergence of a more democratic Iran or of more moderate leadership may diminish Iran's hostility toward Israel as well as Israel's heightened threat perceptions of Iran. The United States should pay close attention not only to Iran's nuclear program but also to such issues as human rights abuses, signaling to the Iranian people that the United States cares about Iran as a nation, not merely as a problem to be solved.

Diplomacy and Sanctions

Iran and the United States have substantial grounds for their mutual antipathy. Iranian grievances go back to the U.S. role in overthrowing Iran's democratically elected government in 1953, followed by Washington's backing of the shah for 26 years and then U.S. support for Saddam Hussein's war of aggression against Iran, during which the U.S. Navy accidentally shot down an Iranian civilian airliner over international waters in the Persian Gulf in 1988. U.S. grievances date to the 1979 seizure of the U.S. embassy in Tehran and the holding hostage of its staff for 444 days, followed by Iranian links to terrorist attacks on U.S. forces in Beirut in 1983 and in Saudi Arabia in 1996 and Iranian support for extremist movements in Lebanon, Gaza, Iraq, and Afghanistan. In the past decade, Iran's nuclear program has emerged as the dominant concern.

U.S. diplomatic leverage is constrained by the bitter history of U.S.-Iranian relations and the degree of domestic legitimacy that the Islamic Republic derives from defying the United States. The 2009 Iranian presidential election and the resulting divisions among Iranian political elites and within Iranian society have made the Islamic Republic even less susceptible to direct U.S. diplomatic influence, but also more vulnerable to U.S. economic leverage and "soft power."

AP IMAGES/OFFICE OF THE SUPREME LEADER

Iranian Supreme Leader Ayatollah Ali Khamenei, left, speaks to the Experts Assembly in Tehran on March 8, 2012. Khamenei welcomed comments by U.S. President Barack Obama advocating diplomacy and not war as a solution to Iran's nuclear ambitions, a rare positive signal in long-standing hostile exchanges between Tehran and Washington.

Even though the regime's conservative and "principlist" (fundamentalist) decisionmakers, ascendant in the postelection period, are unlikely to be swayed by U.S. efforts at engagement, their repression of the Iranian people and their assertive foreign policy make it easier for the United States to rally international pressure against them. Iran's recent support for Syrian President Bashar Assad's brutal repression of the Syrian people and opposition forces has further weakened Iran's regional stature following the Arab uprisings.

Current U.S. policy has been to ease sanctions only if Iran rolls back its nuclear program entirely by abandoning *uranium enrichment* (even if the Obama administration might allow Iran to enrich uranium up to 5-percent purity, the upper end of the range for most civilian uses). But there is no support anywhere on the Iranian political spectrum for abandoning all enrichment activity and, therefore, little prospect that this larger objective could be attained. Worst of all would be a situation in which Iran openly breached the Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Non-Proliferation Treaty, or NPT) by actually *building, testing, and deploying nuclear weapons*. This latter situation could well prompt other regional states to go down this same path.

We therefore recommend that the United States pursue a set of graduated diplomatic objectives, seeking first to halt the Iranian nuclear program short of weaponization while retaining the leverage to secure Iran's eventual compliance with all its NPT obligations. Iran is seeking nuclear weapons for some combination of security, influence, and prestige; thus, persuading Iran

that violating the NPT will only confirm its pariah status is the best way to dissuade it from crossing that threshold. No effort at persuasion can begin, though, until the United States acknowledges that the Iranian nuclear program might not be reversed and thus commences preparations to deal with the consequences.

Diplomacy is unlikely to yield substantial breakthroughs as long as the current Iranian leadership remains in power. The United States nevertheless needs reliable channels of communication with the Iranian regime to garner information, signal warnings, avoid unintended conflict, and be positioned to move toward accord if and when an opening arises. Should Iran actually build and deploy nuclear weapons, such diplomatic channels will become all the more important.

Explicit U.S. efforts to bring about regime change, whether overt or covert, will probably have the reverse effect, helping to perpetuate the regime and strengthen its current leaders. For the immediate future, the best thing the United States can do to promote reform in Iran is to support the growth of democracy in those other Middle Eastern countries where the United States has greater access and influence. Adopting a regionwide and, indeed, globally consistent approach to democratization is important to establishing the credibility of U.S. support for reform in Iran.

Employing this type of soft power could be decisive in the long run. Harvard University Professor Joseph Nye defines soft power as what a country can obtain "through attraction rather than coercion." It arises from a country's "culture, political ideals, and policies." It is more of a magnet than a mallet. The best way to employ soft power is simply to remove the barriers to exposure. For example, the United States should make Internet censorship by the Iranian regime difficult and help expose the Iranian people to the outside world by encouraging travel and study abroad programs.

Sanctions erect barriers to such exposure—an unavoidable trade-off that needs to be carefully weighed each time new sanctions are levied or old ones renewed. Even as the United States seeks to isolate and penalize the Iranian government, it should seek to expand the exposure of the Iranian people to the United States, the West, and the newly dynamic Middle East.

Israeli Security

Proponents of an Israeli military strike against Iranian nuclear facilities might believe that Israel could endure the short-term military and diplomatic fallout of such

action, but the long-term consequences would likely be disastrous for Israel's security. Those believed to favor a military option, such as Israeli Prime Minister Benjamin Netanyahu and Defense Minister Ehud Barak, argue that the Middle East with a nuclear-armed Iran would be far more dangerous than a military attack to prevent it. But their position rests on a faulty assumption that a future, post-attack Middle East would indeed be free of a nuclear-armed Iran. In fact, a post-attack Middle East may result in the worst of both worlds: a nuclear-armed Iran more determined than ever to challenge the Jewish state, and with far fewer regional and international impediments to doing so.

Thus, what the region's future may hold is not an Iran that has or has not acquired nuclear weapons, but rather a nuclear-armed Iran that has or has not been attacked by Israel. And while a nuclear-armed Iran that has not been attacked is dangerous, one that has been attacked may be much more likely to brandish its capabilities, to make sure that it is not attacked again.

Israel and Iran have not always been rivals, nor are they natural competitors. They do not have territorial disputes. They do not compete economically. They have traditionally maintained distinct regional zones of interest (the Eastern Mediterranean for Israel and the Persian Gulf for Iran). Their shared geopolitical interests led to years of cooperation before and even after Iran's 1979 revolution. Arab governments have regarded both countries with great suspicion, while both viewed Saddam Hussein's Iraq as the greatest obstacle to their national security interests.

Only in the past decade have Israel and Iran come to view each other as rivals. Israeli perceptions of the Iranian threat stem, in part, from Iran's expanding missile capabilities and nuclear advances. But just as critical is Israel's view that Iranian regional influence is on the rise, infringing on Israeli interests and threatening stability in areas bordering Israel. Israeli leaders worry that if Iran acquired a nuclear weapon capability, its influence would only grow, severely limiting both Israeli and U.S. military and political maneuverability in the region.

The rise of Iranian principlists has increased Iranian hostility toward Israel and deepened Israeli concerns over Iran's regional ambitions. Iranian President Mahmoud Ahmadinejad has spoken of "wiping" Israel off the map. But the Iranian regime today is undergoing an intense internal battle, and Ahmadinejad's harsh rhetoric, though motivated by ideology, also

AP IMAGES/VAHID SALEMI

An Iranian goldsmith shows gold coins at the Grand Bazaar in Tehran, Iran, on January 26, 2012. Worried about the potential impact of economic sanctions, Iranians were focused on buying U.S. dollars and Iranian gold coins instead of depositing money in banks offering interest rates far lower than the inflation rate—until Iranian President Mahmoud Ahmadinejad approved raising bank interest rates to 21 percent.

serves his domestic needs to satisfy other principlists on foreign policy issues. That said, there are many in Israel who take this anti-Israel ideology seriously.

The Middle East's geopolitical transformation over the past decade has further intensified the rivalry. When the U.S. invasion of Iraq in 2003 eliminated a common adversary of Israel and Iran, the latter began to see itself as the Middle East's ascendant power, a view shared by many of the former's political and military elite. The 2006 war between Hezbollah and Israel—in which Iranian tactics and arms were seen as effective against Israel—reinforced the perception of Iran as the region's great power. The Arab uprisings since 2011 have added to Israeli concerns, although this turmoil has created even greater vulnerabilities and limitations for Iran.

The United States can help manage the Israeli-Iranian rivalry by averting a military conflict through prevention and preparation. For Israel, this means discouraging an Israeli military strike on Iran's nuclear facilities while bolstering Israeli military capabilities. For Iran, this means continuing to dissuade the regime from weaponizing its nuclear program while preparing to deter a nuclear-armed Iran if such efforts fail. In addition, the United States should:

AP IMAGES

Iranians walk in Tehran's old bazaar. As of October 31, 2011, the United Nations Population Fund estimated Iran's population to be 75 million.

Avoid putting public pressure on Israel. U.S. public pressure on Israel will likely backfire given Israel's sense of isolation, turning Israeli popular opinion, which is divided on the question of a military strike option, against the United States and allowing for more defiant positions among Israeli leaders.

Quietly attempt to influence internal Israeli debates about the utility of a military strike. U.S. intelligence officials should support the assessments of former and current Israeli officials who have argued against a military option. U.S.-sponsored seminars outlining U.S.

concerns and risk assessments for the Israeli intelligence and military community could also help shape the internal debate.

Continue to bolster security cooperation and intelligence sharing with Israel, and make such efforts more visible to the Israeli public. Making the extensive U.S.-Israeli security cooperation more known to the Israeli public could help assuage Israelis' fears of isolation and make them less tolerant of Israeli leaders who defy U.S. leaders. Encouraging Israeli leaders

and journalists to report more to the public about security cooperation efforts could be helpful.

Increase understanding about how deterrence between Israel and Iran could evolve. War games now taking place at nongovernmental institutions in the United States and Israel explore conflict scenarios

involving Israel and Iran. Such games clarify how an Israeli-Iranian deterrence relationship might evolve and what military or political steps could heighten or diminish conflict.

Encourage direct communication between Israelis and Iranians through "track-two" diplomatic dialogues. Should Iran acquire a nuclear weapon capability, both Israel and Iran will have an interest in preventing nuclear conflict. Dialogue, though not possible at official levels in the immediate future, is possible through unofficial, track-two security discussions among Israeli and Iranian security experts, sponsored by U.S. or European nongovernmental institutions.

Continue engagement and sanction policies that may affect Iran's internal debate. Iran is not necessarily intent on weaponizing its nuclear program. It may be developing the know-how and infrastructure, but it may decide to keep its nuclear program in the virtual realm. Its decisions are based on cost-benefit calculations affected by U.S. pressures and perhaps positive inducements.

Consider scenarios in which the Iranian regime is radically transformed. The Islamic Republic faces widespread popular dissatisfaction and deepening internal cleavages. Internal developments could alter the Israeli-Iranian rivalry and U.S. policy significantly. In particular, the United States should focus not only on the Iranian nuclear program but also on such issues as human rights abuses in Iran.

Iranian Citizenry

The Islamic Republic has become one of the worst human rights abusers in the Middle East. The 2009 Iranian presidential election, widely perceived in Iran as fraudulent, led to a dramatic increase in Iranian state repression. Iranians who oppose the clerical-led regime are routinely harassed and jailed, often tortured, sometimes raped, and even executed. The leaders of the opposition Green Movement, including former Prime Minister Mir Hussein Mousavi, have been placed under house arrest and isolated from their families and followers. The Iranian regime has stepped up its use of force as it faces the 2013 presidential election, which could become another occasion for public demonstrations.

Yet the Iranian regime remains vulnerable to the same domestic forces that have led to the toppling of dictatorships across the Arab world. The regime may have silenced the Green Movement's leadership, but it has not been able to crush Iranian aspirations for

The Iranian regime remains vulnerable to the same domestic forces that have led to the toppling of dictatorships across the Arab world.

a freer and more democratic form of government. Like many of their Arab neighbors, Iranians face the daily frustration and indignity bred by an increasingly repressive system. Iranian women are denied equal rights despite their educational, economic, and civic accomplishments. Iranian youth languish, bereft of the opportunities and freedoms afforded to their peers across the world. Ethnic, religious, and sexual minorities live in constant fear.

Recent revelations of massive corruption in Iran, including banking embezzlements by people closely tied to the regime, have shown that the Islamic Republic has deviated from its self-described mission of erasing the social inequality that had existed under the monarchy. Iran today is a nation of haves and have-nots. Those with close connections to the government live in luxury, while the rest of Iran's people endure soaring inflation and rising unemployment. Disillusionment

Prolific Profanities Seem to Predict Prominent Protests

Social media reportedly played a big role in the large-scale protests following the 2009 Iranian presidential election by enabling the opposition to communicate and coordinate despite government censorship of other media. In the nine months following the election, 2.5 million tweets marked with the hashtag #IranElection were posted to Twitter by Iranians and others discussing the election and its aftermath. RAND categorized the tweets by word types (such as "anger words," "swear words," or "first-person plural pronouns" such as "we" and "our") and names of political individuals or entities (such as "Ahmadinejad," "Neda Agha-Soltan," or "Revolutionary Guards").

One category stood out: swearing. Profanities spiked on Twitter during or immediately prior to each protest involving hundreds of thousands or millions of people (see the figure). This suggests that swearing levels could forecast the outbreak of protests. Particularly in countries with limited freedom of expression, this kind of analysis holds promise for assessing public opinion, forecasting major political events, and shaping international outreach efforts.

Scan the QR code with your smartphone to view an interactive graphic showing several word categories. Also available at www.rand.org/iran-election-tweets

SOURCE: *Using Social Media to Gauge Iranian Public Opinion and Mood After the 2009 Election*, Sara Beth Elson, Douglas Yeung, Parisa Roshan, S. R. Bohandy, Alireza Nader, RAND/TR-1161-RC, 2012, 108 pp., ISBN 978-0-8330-5972-7, \$21, www.rand.org/t/TR1161

with the regime exists even throughout Iran's political and military circles.

Conditions in Iran suggest that a "Persian Spring" is possible. But Iranians have not, so far, followed the footprints of the Tunisian, Egyptian, Libyan, Yemeni, and Syrian revolutionaries. The Green Movement today is divided and leaderless, and it faces an even more fundamental weakness: It seeks to preserve the very same Islamic Republic that oppresses it, complete with a constitution that empowers unelected and unaccountable governing bodies that prevent free and fair elections. The Green Movement's inherent weaknesses, however, have not given way to the total suppression of the democracy movement in Iran. Iranians have increasingly engaged in acts of civil disobedience independent of the Green Movement and its leadership.

But the regime maintains support among a sizable portion of the population, many of whom view the Islamic Republic as a force of "resistance" against U.S. "imperialism" in the Middle East. The regime exploits Iranian nationalism to buttress its own legitimacy and authority. It depicts the Green Movement and other civil rights actors as "pawns" of Western powers and portrays U.S. and international opposition to the Iranian nuclear program as part of an effort to deny Iran advanced technology and its place among the world's great nations.

Thus, U.S. opposition to the Iranian nuclear program, while necessary, has also had the effect of strengthening the regime among its core supporters. The intense U.S. focus on the nuclear program may have also convinced many Iranians that the United States is concerned solely with its security interests in the Middle East, rather than with the plight of ordinary Iranians.

Recently, the United States has begun shifting toward a balanced approach, placing a greater emphasis on Iranian human rights abuses—a shift that can counter negative Iranian public perceptions of U.S. intentions. The U.S. government has supported the establishment of a special United Nations human rights monitor for Iran. The United States has also imposed financial and travel sanctions on high-ranking Iranian security officials for their involvement in human rights abuses.

Additional steps should now be taken. The international community, including the White House and the U.S. State Department, should be more vocal in excoriating Iran's human rights abuses. Condemning these abuses should not be confused with interfering

in internal Iranian affairs. As a signatory of numerous international conventions, Iran has a legal obligation to uphold its people's human rights. When it fails to do so, the United States and the world community have a responsibility to speak up. The Iranian government is, perhaps surprisingly, very sensitive in this area, due to its ambition to be perceived as a regional leader.

In tandem, the United States should sanction additional members of the Iranian security services, especially top-ranking *and* mid-ranking members of the Islamic Revolutionary Guards Corps and the Basij paramilitary forces responsible for the repression and human rights violations. Such sanctions would discourage foreign governments and companies from engaging with these individuals or conducting business with them and their affiliates, demonstrating to the regime that its domestic and foreign policies have substantial concrete consequences.

These steps would help the Green Movement in two ways. First, an international focus on Iran's human rights record would make it tougher for Tehran to persist with its abuses. Second, this focus would disabuse the regime of its perception that the United States is willing to sacrifice the human rights and pro-democracy aspirations of the Iranian people for the sake of a nuclear deal.

The Iranian people, much like the Tunisians and Egyptians, are capable of challenging their government on their own. They do not need direct material or financial aid, of an overt or covert nature. The United States and other countries might not be able, through diplomacy and sanctions, to dissuade the Islamic Republic from continuing its nuclear program, but they can demonstrate that they are on the side of Iranian democrats who could well rule Iran one day. ■

Related Reading

Coping with a Nuclearizing Iran, James Dobbins, Alireza Nader, Dalia Dassa Kaye, Frederic Wehrey, RAND/MG-1154-SRF, 2011, 154 pp., ISBN 978-0-8330-5865-2, \$21, www.rand.org/t/MG1154

Iran's Human Rights Abuses, Alireza Nader, RAND/CT-369, 2011, 7 pp., Web only: www.rand.org/t/CT369

Iran's Nuclear Future: Critical U.S. Policy Choices, Lynn E. Davis, Jeffrey Martini, Alireza Nader, Dalia Dassa Kaye, James T. Quinn-livan, Paul Steinberg, RAND/MG-1087-AF, 2011, 152 pp., ISBN 978-0-8330-5175-2, \$20, www.rand.org/t/MG1087

Israel and Iran: A Dangerous Rivalry, Dalia Dassa Kaye, Alireza Nader, Parisa Roshan, RAND/MG-1143-OSD, 2011, 116 pp., ISBN 978-0-8330-5860-7, \$21.50, www.rand.org/t/MG1143

Calls of Duty

America Weighs Its Obligations to Veterans and Their Families

First Lady Michelle Obama and Dr. Jill Biden are leading the Joining Forces Initiative to offer support and opportunities to U.S. military servicemembers and their families. In his State of the Union message in January, President Barack Obama proposed a Veterans Jobs Corps that would help communities hire veterans as cops and firefighters. What follows are some of the ways in which RAND research can help to ensure that the newest generation of veterans receives the health care, employment and education opportunities, and other benefits that it has earned.

AP IMAGES/THE VIRGINIAN-PILOT, BILL TIERNAN

Members of the U.S. Air Force and U.S. Army listen to President Barack Obama at the Joint Base Langley-Eustis in Hampton, Virginia, on October 19, 2011. With First Lady Michelle Obama at his side, he praised companies that have promised to hire 25,000 veterans or military spouses within two years, calling it a sign of patriotism and business savvy.

SUICIDE PREVENTION
By Rajeev Ramchand, RAND behavioral scientist

Between 2001 and 2009, the suicide rate among active-duty U.S. personnel nearly doubled, rising from 10 to 18 per 100,000 and underscoring the need to identify those at risk and improve their access to high-quality suicide-prevention programs.

Raise awareness about suicide and promote self-care. Focus on skill building, particularly for such help-seeking behavior as self-referrals and for reducing such risk factors as substance abuse.

Identify those at high risk. Screen servicemembers for mental health problems, one of the strongest risk factors for suicide.

Facilitate access to high-quality care. Multiple barriers obstruct access, including perceptions that behavioral health care is ineffective or will harm a person's military career.

Provide high-quality care. Chaplains, health care providers, and behavioral health care professionals need to be trained in evidence-based or state-of-the-art practices for behavioral health generally and for suicide risk assessment specifically.

Restrict access to lethal means. Firearms figure prominently in military suicides, so initiatives to restrict access to firearms should be considered.

Respond appropriately. Given the possibility of copycat suicides, prevention programs must have a strategy for how details of suicides are communicated in the media, as well as how the information is passed on to groups to which the deceased belonged.

Suicide can be prevented. The best available evidence indicates that the above guidelines, combined with proper evaluation of prevention programs and systematic tracking of suicides and suicide attempts, can help avoid some of these untimely deaths.

MENTAL HEALTH TREATMENTS
By Katherine E. Watkins, RAND senior natural scientist

Mental health services delivered by the U.S. Department of Veterans Affairs (VA) for schizophrenia, bipolar disorder, posttraumatic stress disorder (PTSD), major depression, and substance use disorders are usually as good as or better than those delivered by private health plans.

But VA care often does not meet VA expectations. Overall, only 32 percent of veterans receiving mental health care in 2007 perceived improvement in their conditions. Only 20 percent of those with PTSD and 31 percent of those with major depression received cognitive-behavioral therapy.

Between 2007 and 2009, evidence-based practices (those treatments that have been empirically linked to improved mental health outcomes) became much more available.

Table with 5 columns: Characteristic, Army, Navy, Air Force, Marine Corps. Rows include: Raise awareness and promote self-care, Identify those at high risk, Facilitate access to high-quality care, Provide high-quality care, Restrict access to lethal means, Respond appropriately. Legend: Green = Present in program, Yellow = Present to some degree, Red = Not present.

SOURCE: The War Within: Preventing Suicide in the U.S. Military, Rajeev Ramchand et al., RAND/MG-953-OSD, 2011, 228 pp., ISBN 978-0-8330-4971-1, \$28, www.rand.org/t/MG953

(for patients with severe schizophrenia and bipolar disorder) was available in 68 percent of VA facilities in 2007, rising to 82 percent in 2009. In 2007, only 5 percent of VA facilities reported having a suicide-prevention coordinator available; by 2009, 99 percent did so.

The VA represents a promising setting for quality improvement. It has a highly developed infrastructure, including electronic medical records, to support quality measurement. As a self-contained and integrated system, the VA can support greater standardization of clinical assessment and treatment while promoting the use of recommended care in clinical practice. The VA can draw on these strengths in addressing the mental health care needs of U.S. veterans and, in doing so, can serve as a model for improving mental health care in the private sector as well.

MENTAL HEALTH PROGRAMS

By Robin M. Weinick, associate director of RAND Health

In addition to clinical care and chaplaincy services, the U.S. Department of Defense sponsors 211 programs to help U.S. servicemembers and their families deal with PTSD, major depression, and traumatic brain injury. There is some duplication of effort across these 211 programs, and there are significant challenges in determining which programs work and which do not.

There is no single source within the defense department or the service branches that maintains a list of the programs or tracks new program development. The effectiveness of the programs is not being consistently evaluated. Less than a third of the programs in any branch of service reported having done an evaluation to assess effectiveness in the previous 12 months.

The defense department should conduct a comprehensive needs assessment to identify how many servicemembers and their family members require mental health programs, what types of assistance they need, and where they are located. The department should then identify how well the programs are meeting those needs, what opportunities exist for improvement, and where new programs are needed. The department should also identify a central authority responsible for coordinating the programs. This authority would oversee the tracking and evaluation of program effectiveness.

The proliferation of mental health programs creates a high risk of poor investments of resources. Given the investments that the nation is making in these programs, servicemembers and their families deserve to know what the investments are buying. Strategic planning, centralized coordination, the sharing of information across branches of service, the identification of service gaps, and rigorous evaluation are imperative for ensuring that these investments will result in better outcomes and will reduce the burden faced by servicemembers and their families.

HEALTH NEEDS IN THE COMMUNITY

By Terry L. Schell, RAND senior behavioral scientist, and Terri Tanielian, director of the RAND Center for Military Health Policy Research

Most veterans do not use the VA as their primary source of health care. Many have private, employer-sponsored health insurance, and veterans may find private providers to be more conveniently located or preferable for some other reason. However, the private health care system may not be well prepared for the unique needs of veterans. The civilian system generally does not have extensive mental health screening and referral procedures, and these providers may lack training in evidence-based

treatments for PTSD and depression. Improving the capabilities of the civilian health providers to screen, refer, and treat veterans could substantially improve their health and well-being.

For veterans who have returned to civilian life, it is also possible to improve their health by improving their utilization of VA treatments. One of the barriers to access is the complexity of VA eligibility and priority rules. Some veterans have praised the work of VA regional care coordinators, who can provide personalized assistance in navigating these systems. Expanding the use of these coordinators may improve access to a range of treatments and benefits.

There may also be ways to reduce barriers to starting and sustaining mental health treatment. Veterans have cited concerns about the possibly negative career repercussions and about the side effects of medication as reasons for not obtaining needed mental health care. It might be helpful to educate veterans about the laws ensuring confidentiality of medical services as well as recent changes to the security clearance process that reduce the likelihood of discrimination against those in treatment. Given the concerns among many veterans about drug side effects, it might also be important to make sure that psychotherapy is widely available.

TAX CREDITS FOR HIRING

By Paul Heaton, director of research at the RAND Institute for Civil Justice

Both major U.S. political parties have supported tax credits for businesses that hire unemployed veterans, culminating in the November 2011 passage of the VOW to Hire Heroes Act. This

AP IMAGES/MARK LENNIHAN

Veterans wait to register at a job fair at the Intrepid Sea, Air & Space Museum aboard the Intrepid aircraft carrier, docked on the west side of Manhattan in New York City, on March 28, 2012. A military marching band, rear, serenades the job seekers as they enter the fair, part of the "Hire 500,000 Heroes" program to help war veterans and their spouses find jobs.

legislation followed expansions of the Work Opportunity Tax Credit (WOTC) in 2007 and 2009.

The 2007 expansion made tax credits of up to \$4,800 available to employers who hired disabled veterans who were recently discharged or were recently unemployed for more than six months. These tax credits raised employment among disabled veterans by 2 percent, which translates to an additional 32,000 disabled veterans who were employed in 2007 and 2008. The jobs went to veterans with cognitive and noncognitive impairments alike. The jobs were primarily in full-time positions. As a result, eligible veterans increased their wages by around 40 percent overall.

The 2007 tax credit expansion cost an estimated \$610 million throughout 2007 and 2008. Meanwhile, the increased wages among the employed disabled veterans totaled about \$3.2 billion. Thus, the credits appear to have generated several billion dollars' worth of additional economic output while effectively reducing unemployment among disabled veterans.

The largest hiring increases, however, went to veterans at least 40 years old, the vast majority of whom had served prior to 9/11. The benefits also appeared larger among those who were not from traditionally disadvantaged demographic groups, suggesting that disadvantaged veterans could face higher hurdles to obtaining employment than can be readily overcome by tax credits.

The 2009 WOTC expansion and the 2011 VOW to Hire Heroes Act have offered larger incentives to businesses and covered a broader set of veterans. The findings so far suggest that such investments may provide a valuable source of labor market support for returning and injured veterans during a period of continued labor market weakness. At the same time, it will be important going forward to consider how the hiring incentives can be designed to benefit the widest possible set of veterans.

THE NEW GI BILL

By Jennifer L. Steele, RAND education policy researcher

Delayed and erroneous payments plagued the early implementation of the Post-9/11 GI Bill, formally known as the Post-9/11 Veterans Educational Assistance Act of 2008. Both the VA and the U.S. Congress have since taken steps to mitigate initial problems with the law, but higher education institutions will continue to need to guide students in understanding their benefit options.

The Post-9/11 GI Bill, which took effect in 2009, increased the higher education benefits available to veterans who have served in the U.S. armed forces since September 11, 2001. Two and a half years later, nearly 700,000 veterans have used the benefits to pursue higher education. The bill represents the largest expansion of veterans' education benefits since passage of the original GI Bill in 1944.

The Post-9/11 GI Bill took effect in 2009. Nearly 700,000 veterans have used the benefits.

Because the new law is more complex than its predecessor, the Montgomery GI Bill, it has also been more difficult to administer. This is because the new benefits vary as a function of the costs at higher education institutions and because tuition payments are sent to schools, whereas living allowances and book stipends are paid directly to students. Early implementation was also hampered by the rapid startup time, given that the VA had just over a year to upgrade its claims processing system.

Beneficiaries have expressed satisfaction with several aspects of the law but have encountered not just delayed payments but also overpayments resulting in debt collection notices and living allowance suspensions, limited access to required courses, difficulty tracking their payments and understanding their options, and difficulty transferring military training to academic credits.

Higher education institutions can assist veterans by ensuring that administrative staff understand the new GI Bill, by setting transparent and consistent rules for transferring military training to academic credits, by providing information sessions for veterans to help familiarize them with the resources available on campus, and by encouraging student efforts to build student veterans organizations. Fellow veterans are often the most helpful sources of support in assisting veterans in their transitions to academic life.

FAMILY WELL-BEING

By Anita Chandra and Laura L. Miller, RAND behavioral/social scientists, and Amy Richardson, RAND policy researcher

Surveys of military spouses have shown that their lives change dramatically during moves and deployments. There can be financial gains, enhanced family closeness, increased patriotism, and other benefits, but many spouses also report negative effects of moves and deployments on employment, family finances, child behavior, and their personal emotional well-being.

Compared with children in the general population, children of deployed parents report elevated levels of anxiety symptoms, emotional difficulties, and problems with family functioning. Children whose parents have deployed 19 months or more since 2001 have scored modestly lower on academic achievement tests than those who have experienced less or no parental deployment.

AP IMAGES/BARBARA RODRIGUEZ

Therapist Kate Dillingham, left, and U.S. Marine Duane Stuckman, right, lead a role-playing exercise for kids in Chicago as part of Operation Oak Tree, which offers arts-focused therapy to help military families deal with the emotions surrounding deployments.

Some ways to alleviate these family burdens could include the formation of partnerships with national companies and contractors to hire military spouses, expanded financial assistance during moves and deployments, increased availability of child care and youth recreational activities, academic assistance programs for children whose parents are on extended leave, and support for military spouses to help alleviate stress.

To complement the traditional evaluations of programs that serve military personnel and families, RAND has designed a new approach to assessing their needs—one that places their perceptions of needs at the forefront. In this framework, servicemembers and families are asked about their greatest problems and needs first and are then connected to the appropriate, available resources.

This framework could be adapted to answer questions about resources for personnel in war zones, problems of wounded veterans, or needs for professional counseling. The attention given within this framework to military and nonmilitary resources alike could give base commanders a sense of the additional benefits that could be obtained from civilian services. Beyond helping commanders meet unmet needs on base, the new framework could help commanders refer military families to sources of support in the broader community. ■

Related Reading

For a list of the 11 research reports from which these essays are drawn, visit www.randreview.org/issues/2012/spring/veterans.html

A Flood of Innovation

Louisiana's Coastal Master Plan

By Michael D. Rich

Michael D. Rich is president and chief executive officer of the RAND Corporation.

PHOTO BY DIANE BALDWIN

Innovative research and analysis—the kind that emerges from careful, rigorous thought and scientific investigation—need not take years to have an impact on policy. For proof, look no further than to Louisiana, where RAND computer models and empirical analyses are helping protect and restore battered and vulnerable coastal communities and environments.

Earlier this year, policymakers in Baton Rouge issued the penultimate draft of Louisiana's Comprehensive Master Plan for a Sustainable Coast. The plan, which was expected to be approved by Louisiana's legislature in April 2012, lays out long-term steps that Louisiana can take to reduce risks from the types of devastating storm surges that accompanied hurricanes Katrina and Rita and to recover land and wetlands lost to dredging and erosion over the years, lands whose fragilities were further exposed during the Deepwater Horizon oil spill that began in April 2010.

The RAND Gulf States Policy Institute and the Pardee RAND Graduate School (PRGS) played a prominent role in developing the plan. Early in the process, the Coastal Protection and Restoration Authority of Louisiana convened several modeling teams to help the state better understand how it could improve coastal conditions through new investments in storm protection and coastal restoration projects. Among the teams was one from RAND, which sought to identify strategies that would be successful over the next 50 years.

To do this, the RAND team developed two tools: a hurricane flood risk model dubbed CLARA (Coastal Louisiana Risk Assessment) and a decision support model called the Planning Tool. The CLARA model estimates flooding from storm surges (using the statistical properties of past hurricanes and high-resolution

simulations of storm surges from plausible future storms), the damage to property that could result from this flooding, and the effects of proposed projects intended to reduce flood risk. The CLARA model's estimates were a key data source for RAND's Planning Tool. The Planning Tool compared and ranked nearly 400 risk reduction and coastal restoration projects and evaluated different combinations of them that could constitute a comprehensive coastal strategy. Together, the models are helping policymakers prioritize \$50 billion worth of investments that Louisiana intends to make over the next five decades: in levees, pumps, and other protective public infrastructure; in flood-proofing homes; in revising municipal building codes; in creating marshes; and in diverting sediments.

RAND analyst Jordan Fischbach co-led the CLARA effort, leveraging innovative methods that he first employed in his PRGS dissertation on reducing flood risks in New Orleans—work made possible by the philanthropic support of RAND donors. David Groves, a PRGS alumnus who is now a full-time RAND policy researcher and professor at PRGS, led the Planning Tool team. A half-dozen current PRGS fellows also made important contributions to this work.

Since its founding in 1970, PRGS has trained generations of policy leaders. Graduates move on to lead and shape policy through service in government, research organizations, academia, and the private sector. The school exhorts students and faculty to “be the answer” in addressing policy challenges in our communities and around the world. Nowhere has that motto been on better display than in the work led by Groves and Fischbach in contributing to the Louisiana plan.

At RAND, the role of PRGS is critical. It serves as an in-house idea incubator, generating new tools and methodologies and producing long-range insights that RAND research clients, increasingly under pressure to focus on near-term challenges, are no longer able to support as generously as in the past.

For many years, I have had the pleasure of serving on student selection committees at PRGS and supervising dissertation research. Now, as president of RAND, I look forward to the world getting to know and experience firsthand the waves of innovation generated by this unique educational institution. ■

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Michael Lynton, the chairman and CEO of Sony Pictures Entertainment, is a trustee of the RAND Corporation and a member of the Pardee RAND Graduate School Board of Governors. He is also the cochair of Politics Aside, a postelection event that engages policymakers, opinion leaders, philanthropists, and RAND's leading thinkers in a nonpartisan examination of pressing policy challenges. Politics Aside takes place on November 15–17, 2012, in Santa Monica, California. Visit www.rand.org/politicsaside for more information.

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