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## Prevalence of Insulin Resistance Syndrome in a Primary Health Care Center in Kuwait

### To the Editor:

Insulin Resistance Syndrome (IRS), which represents a group of atherogenic risk factors, the root cause of which is insulin resistance, has caused much concern over the past few years.

As the name implies, the major abnormality in IRS is insulin resistance. Obviously there is impaired responsiveness to endogenous and exogenous insulin, leading to hyperinsulinemia, which will lead to the metabolic abnormalities that characterize the syndrome. The National Cholesterol Education Program published its third report (ATP III) in 2001 and accordingly the diagnosis of IRS based on the existence of three or more of the disorders that constitute the syndrome (insulin resistance, hypertension, low levels of high-density lipoproteins cholesterol (HDL-C), high triglycerides (TG), and central obesity).<sup>1</sup> Applying these criteria, the syndrome will be found to be highly prevalent in the general population. The third report (ATP III) defined a low HDL as being <40mg/dl in males and <50mg/dl in females, while in the ATP II,<sup>2</sup>

HDL-C was considered low when its level was <35mg/dl. It was also highlighted in the ATP III that even borderline elevation of TG should be treated.

People with IRS are at high risk of cardiovascular events.<sup>3</sup> In an attempt to study this high-risk condition, we carried out this study using the ATP III criteria to detect the prevalence of this syndrome in a primary health care center.

The study was conducted in 2002. Subjects were Kuwaiti individuals, ages 30–60 years. The screening included measurements of blood pressure and waist circumference, fasting plasma glucose (FPG), fasting TG, and HDL-C using the lipid analyzer Cholestech.

Waist circumference was considered increased if it exceeded 40 inches in males and 35 inches in females.<sup>3</sup> Low HDL-C was considered when its level was <40mg/dl in males and <50mg/dl in females. High TG was considered when its level was >150mg/dl. Impaired fasting glucose (IFG) was considered when its level was in the range of 6.1–6.9 mmol/L. Blood pressure was considered high if the mean of three consecutive measurements at 2 weeks apart was  $\geq 140/90$  mmHg for nondiabetic subjects or  $>130/80$  mmHg for diabetic patients.<sup>4</sup>

There were 609 participants, 39.4% male and 60.6% female. The diabetic patients comprised 12% and the hypertensive patients 11.8%. Increased waist circumference was seen in 57.5%. IFG was detected in 13.6%, high TG and low HDL-C were found in 46.5% and 56%, respectively. According to the ATP III guidelines, the prevalence rate of IRS among the participants was 32.8%, while with ATP II guidelines, the prevalence would have been 18.1%. In our study, the prevalence of IRS was significantly affected by the age group—it was 26% in the ages 30–40 and 34.4% in the ages >40–60.

Because the root causes of this syndrome are improper nutrition

and inadequate physical activity, it is recommended that a healthy lifestyle be adopted, including weight control and increasing physical fitness. Despite the availability of many medications that can control hypertension, blood sugar, and lipids,<sup>5</sup> low HDL-C remains a problem since there is no effective drug treatment to elevate this protective form of cholesterol to the safe levels. That is why we think that the ATP III guidelines will make the IRS easier to diagnose but somewhat harder to manage.

In conclusion, IRS is highly prevalent among the Kuwaiti individuals attending our primary health care center. General practitioners need to have the skills necessary to properly identify and manage this high-risk condition.

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William Huang, MD  
Feature Editor

*Editor's Note:* Teaching communication skills to learners is an important responsibility of office-based teachers. In this month's column, John F. Clabby, PhD, and Robert O'Connor, MD, of UMDNJ-Robert Wood Johnson Medical School describe how to teach mirroring techniques, which learners can easily use to build rapport with patients.

I welcome your comments about this feature, which is also published on the STFM Web site at [www.stfm.org](http://www.stfm.org). I also encourage all predoctoral directors to make copies of this feature and distribute it to their preceptors (with the appropriate *Family Medicine* citation). Send your submissions to [williamh@bcm.tmc.edu](mailto:williamh@bcm.tmc.edu). William Huang, MD, Baylor College of Medicine, Department of Family and Community Medicine, 3701 Kirby, Suite 600, Houston, TX 77098-3915. 713-798-6271. Fax: 713-798-7789. Submissions should be no longer than 3–4 double-spaced pages. References can be used but are not required. Count each table or figure as one page of text.

## Teaching Learners to Use Mirroring: Rapport Lessons From Neurolinguistic Programming

John Clabby, PhD; Robert O'Connor, MD

There is a renewed emphasis on the need to teach and assess communication skills. The Association of American Medical Colleges encourages both medical schools and residencies to include communication skills in their curricula.<sup>1,2</sup> In addition, the Federation of State Medical Boards, the National Board of Medical Examiners, and the Educational Commission for Foreign Medical Graduates have collaborated to develop the US Medical Licensing Examination-Step 2 Clinical Skills, which includes an assessment of students' ability to establish rapport and communicate with patients.<sup>3,4</sup> In the Kalamazoo

Consensus statement, participants in the Bayer-Fetzer Conference on Communication in Medical Education concluded that "a strong, therapeutic, and effective relationship is the *sine qua non* of physician-patient communication."<sup>5</sup>

An important aspect of developing therapeutic relationships with patients is the building of rapport. Teaching learners to build rapport presents a number of challenges. One is that there is not a clear consensus on what constitutes positive rapport building. In one study, faculty examined the same videotape segment of a rapport-building exchange and had divergent observations of the quality of the rapport building, ranging from positive to inadequate and even negative.<sup>1</sup> A second challenge is that faculty are not consistent in evaluating a learner's rapport-building skills across an encounter. In this same

study, 72% of the faculty identified specific rapport skills demonstrated in the early phase of the interview, but only 25% were able to identify those same rapport-building skills later in the same interview.<sup>1</sup>

Neurolinguistic programming (NLP) offers a mirroring approach that office-based teachers can use to teach learners how to build rapport with their patients. Neurolinguistic programming resulted from John Grinder and Richard Bandler's detailed observations and analysis of the words, voice tone, and body language used by expert therapists to establish rapport and effect changes in others. These expert therapists included Milton Erickson, a hypnotherapist and psychiatrist; Fritz Perls, a psychotherapist; Virginia Satir, a family therapist; and Gregory Bateson, an anthropologist and social psychologist.<sup>6</sup> In their observations, Grinder

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