<u>iMedDrs</u>

INTERNATIONAL MEDICAL DISASTER RELIEF SOLUTIONS

Pandemic panic and pandemonium relieved with virtual self-care and professional tele-care at home, on board or abroad 24/7

Simply download imeddrs from your app store and feel all right

Covid-19 pandemic mitigated with iMedDrs apps mass, multilingual, microbial tele-screening for
comprehensive touch-free medical isolation
and public health studies and planning

State of the art automated medical intelligence
Instant implementation, cost-efficient, clinically effective

Joyce M. Lyon MD Ben Cox Victor K. Misir MD

imeddrs.vm@ gmail.com

Free demo: download imeddrs from your App-store and pretend you have some FLU symptoms

Please note: In an epidemic, thousands can self-screen and self-care at home and abroad <u>simultaneously</u>, in contrast to the current human-intensive initiative which can handle only a few per day and risk infection. iMedDrs provides data-based, computer-generated charts for self-care and professional reports for online consultation. If the internet is not available, specially designed multilingual iMeddrs publications and smart-charts substitute.

iMedDrs

International Medical Disaster Relief Services

Joyce M. Lyon MD, Ben Cox, Victor K. Misir MD imeddrs.vm@gmail.com

21st century virtual automated medical tele-technology can contain contagion and mitigate pandemic – NOW with iMedDrs <u>SELF-CHECK</u> apps – <u>Personal self-care</u> of the simple and <u>Professional tele-care</u> of the complex.

Mass, multilingual, medical screening, surveillance and surveys of vulnerable populations. at home and abroad, for early microbial-carrier detection and medically assisted isolation, as well as for public health evaluation.

Like pandemics in the past, the *current COVID-19*, *highly contagious SARS-CoV-2* virus can significantly affect individual life, liberty and livelihood as well as alter the geo-political, socio-economic landscape of the planet:

Contagion + congregation = contamination + contagious carriers = local epidemics + global pandemic.

Unchecked viral dissemination quickly overwhelms already overcrowded hospitals and clinics, which also close as their infrastructure becomes contaminated, and as their healthcare workers become decimated by infection.

The panic-stricken public will be told to stay home and call doctors, who will not be readily available, if at all !! In any case, scant responders should be reserved for major cases, not occupied with reassurance or minor care.

People will have to look after themselves and each other.

iMedDrs comprehensive, all-inclusive multilingual, voice-interactive, automated medical intelligence <u>COVID-19</u> <u>HOME CARE phone applications</u> prevent microbial infestation from spiraling out of control with <u>virtual personal self-care</u> and online, <u>touch-free professional tele-care</u>, accessed 24/7, at home and abroad, on-line, on-site, on-board and on-shore, worldwide.

Each iMedDrs application not only elicits significant individual medical symptoms but also computer-generates consultation medical reports that can be emailed to professionals for <u>data-driven</u> response. Depending on symptoms and severity, further medical checklists elicit specific data for response at different levels of expertise.

For vulnerable populations, especially today's high density, high-rise, elevator-intensive, multicultural communities, iMedDrs provides mass, multilingual *screening* of infected populations, *surveillance* of inflicted contacts and *surveys* of infested communities for viral-carrier detection and medically assisted isolation.

Importantly, in addition, *digitally* stored personal data also provides cumulative, real time, location and clinical pattern, <u>database-driven</u> public health research, regarding viral clinical presentations, demographic and epidemiologic characteristics as well as strategic deployment of scant physician and physical resources.

It is simple and instant, just download - imeddrs - from your app store and feel all right!- Try it now.

The <u>COVID-19 HOME CARE application</u> asks you 15 'yes' or 'no' COVID-specific symptoms and complications questions, in less than two minutes, via display/touch or voice-interactive virtual interview, in your language.

The automated medical intelligence then digitally stores your specific responses and computer-generates a series of personal and professional <u>data-driven</u> reports that enable <u>personal **self-care**</u> of the simple and <u>professional **tele-care**</u> of the complex:

PERSONAL SELF-CARE

The iMedDrs two-minute 'COVID-19 Home Care' application is designed to help you to avoid infection and protect family;

detect, evaluate, monitor and manage illness individually or in intelligent partnership with healthcare providers.

Based on your answers, the following computer-generated reports are provided: Overview – COVID-19 Influenza-like Syndrome

What you need to know and do in the event of a highly infectious, killer-COVID-19 or flu epidemic:

How the lethal COVID-19 virus is acquired and spread;

What to look for, and how to diagnose COVID-19-related complications;

The diagnoses that are medical emergencies, requiring urgent medical consultation;

The 10 commandments you must follow to prevent infection and to protect families and co-workers.

Use it to familiarize yourself and educate others about the nature of the COVID-19 illness, and how to avoid, manage and combat COVID-19 during an epidemic.

COVID-19 Triage/Management Guidelines

General and COVID-19-specific guidelines to help you triage your medical condition and health status. *Use them to decide how urgently you should contact a healthcare professional (triage).*

COVID-19 screen report

Worded in both public and professional terminology, this report lists the symptoms you have that might indicate COVID-19-related complications.

Equally important, it also lists the symptoms you do not yet have.

Use it to make diagnostic, triage (urgency), treatment decisions, and communicate effectively with doctors.

COVID-19-related complications (diagnoses)

A computer-generated list of possible diagnoses, based on your combination of symptoms, along with a percentage estimation of possibilities.

Note that, in the absence of physical examination by a doctor, these diagnoses cannot be taken as absolute, and are to be used solely for consideration as possibilities, and as talking points or checking on the internet. Use it to make triage decisions and for discussing diagnostic possibilities with healthcare providers.

Multilingual COVID-19 screen report

A COVID-19 screen report, in *English, French and Spanish* medical terminology. This enables care by doctors speaking English, French or Spanish, as most Western doctors are trained in one of these 3 languages.

Use it when traveling abroad, in a cruise ship or disaster camp, in the event of a major local catastrophe, where foreign doctors are invited, and arrive to help.

COVID-19 Monitor (Follow-up) Charts

Your symptoms, listed in a follow-up table, designed to facilitate and record periodic reassessments. Two versions are provided:

One in public terminology for your personal use.

The other in professional terminology for nurses doing home-care or nursing home daily rounds, to document compliance, course and complications, for review by physicians.

Use it as a checklist to monitor and document the course of your illness, and to update your healthcare providers by phone, fax or e-mail, for ongoing professional supervision and continuity of care.

The Automated Medical Intelligence then makes individualized data-driven diagnostic conclusions and therapeutic recommendations for <u>self-care</u>.

Depending on symptoms and severity, <u>further medical checklists</u> are recommended for email <u>professional</u> tele-care consultation with healthcare providers remotely online:

PROFESSIONAL TELE-CARE

The particular healthcare provider consulted depends on your symptoms and severity:

<u>If your symptoms are mild</u>, e.g., fatigue and nasal congestion, and you need over-the-counter (OTC) medication from a drugstore, do the <u>PHARMACY CARE application</u>, which acquires biographic information from you, including allergies, chronic diseases, medication, etc., then you can email the generated report to a local pharmacist to select the appropriate medication for you and deliver at home or drive-through.

<u>If your symptoms are moderate</u>, e.g. yellow sputum and you think you need prescribed medication, do the <u>CLINICAL MD CARE application</u>, which checks the other body systems, cardiovascular, neurologic, etc., creates a professional report, which, emailed to the doctor, focuses a tele-video conference, if necessary- saves time, and ensures data-driven diagnoses and prescription choices, which can be tele-dispensed by a pharmacy.

<u>If your symptoms are severe</u>, e.g. shortness of breath, do the <u>EMERGENCY CARE application</u>, which acquires critical clinical information. The medical report can be emailed to the EMS or emergency room for direction.

<u>If you are admitted</u> to an institution or hospital, do the <u>HOSPITAL CARE application</u>, which acquires comprehensive information about every system in the body, and is submitted to the admitting specialists.

<u>While confined</u> at home or institutionalized, do the <u>COVID HOME CARE</u> application daily, and email to enable doctors' *virtual* touch-free regular, routine traditional *morning rounds*.

All personal healthcare reports are <u>data-driven</u> by your answers to the COVID checklists, and serve to get best care, as well as focus time-limited tele-video conferences where applicable.

The cumulative data from all users, which include time, location, ZIP Code, age, gender, symptom presentation, etc., can be instantly and automatically emailed as data to the local public health department, CDC, even WHO.

This real time and place digital, clinical *big data* can be analyzed to determine the features, extent and spread of contagion and enable *database- driven* strategic deployment of scarce physician and physical assets.

iMedDrs has been designed and devised to provide practical patient/physician partnerships on-site and on-line.

iMedDrs frees overworked, overwhelmed and understaffed responders from minor care and heated confrontations, to focus on more complex cases, to a large extent online. This is augmented by tele-video conference calls, with a matching-language responder where language differences are problematic.

Only the severely ill will then need physical attention at designated PPE-protected and equipped clinics.

Attendance at medical offices are replaced by iMedDrs virtual care, eliminating the risk of acquiring or disseminating contagion in corridors, elevators and waiting rooms.

Instead, iMedDrs identifies COVID cases, provides *confident self-care* in isolation and *competent consultation* with physicians online.

iMedDrs can service thousands of users in hundreds of languages and dialects *simultaneously* and match them with globally listed, *linguistically-compatible*, *volunteer healthcare professionals* for online video conferencing where necessary. The iMedDrs database is digital and translates into linguistic equivalents in over 1000 doctor/patient language combinations and provides an international standard for Global epidemiology.

iMedDrs apps help contain contagion locally and mitigate pandemics globally.

Pandemics are global, therefore mitigation requires multinational coordination!

iMedDrs gives the United States the opportunity to provide worldwide leadership!

Pandemic mitigation can be done - WE CAN DO IT - NOW.

Where there is no internet service available, matching English and multilingual publications enable individuals to selfcare and to think and talk like a doctor.

iMedDrs' publications and automated medical intelligence, translingual, tele-technologies, programs and applications were developed over decades by Dr. Joyce M. Lyon, MD, Dr. Victor Kumar-Misir, MD and Ben Cox, with input from the mayors of multiethnic Toronto and North York in Canada, the Canadian Ministries of Multiculturalism and Defense. Academic input included the cooperation of the College of Family Physicians of Canada, several University of Toronto teaching hospitals and surveys of hundreds of frontline healthcare practitioners. Professional translations in over several languages were vernacularized and contemporized by physician-executives of national medical associations in over 30 countries including Asia-Pacific and Eastern Europe, and has stimulated international accolades and press.



ACCOLADES FROM THE INTERNATIONAL MEDIA AND MEDICAL COMMUNITY

Speaker/Panelist – International linguistic, cross-cultural, computer, smartcard and tele-medicine conferences: Texas Dept. Insurance (TDI) Annual Conference 2019, Canada, U.S.A., Jamaica, Barbados, Brazil, China, Tibet.

Johns Hopkins University Certificate of Achievement "for enhancing the quality of life for people with disabilities through application of computing technology"

American College of Physician Executives - Award of Merit "for innovation in improving healthcare quality management"

"The possible significance to the practice of medicine in general, would be tremendous."

Franklyn G. Prendergast, MD, PhD, Professor & Chairman, Dept. of Biochemistry & Molecular Biology, Mavo Foundation.

"The system devised by Dr. Kumar-Misir enables a doctor to communicate with a patient in any language, without the need for an interpreter." China Daily, Peking, China.

"I have carefully read the materials concerning the Medical Information Gathering System, which you so ingeniously designed. I want to congratulate you for this contribution which is of importance medically, as well as in international cooperation." Chieh-ping Wu, B.S., M.D., Past President, Chinese Medical Association; Honorary President, Peking Union Medical College, Chinese Academy of Medical Sciences, Beijing, China

"We believe that the unique features of the **MIGS** system applied to the particular problems of the Inca peoples would make it possible to overcome these problems, and as it were 'bring the Inca peoples of South America into the 20th century' ---in so far as healthcare is concerned"

Julio Cietlin, MD, Director General, International Center for Family Medicine, Buenos Aires. Argentina.

"The system is undoubtedly of considerable importance for use under Third World conditions."

Bruce McConchie, Director of Programs, World Vision of New Zealand

"In my opinion, **MIGS** is an ingeniously co-ordinated method which easily overcomes translingual and trans-cultural obstacles. It is void of redundancies, and elicits information from the patient in a reliable manner." **Vladimir Bubrin,** Executive Director, Council of National Ethnocultural Organizations of Canada.

"Dr. Kumar's work represents significant advancement in the ability to deliver healthcare to Third World people, where medical personnel are scarce, and where language differences may impede effective communication between medical staff and patient." **Linda Tripp,** Divisional Director, Field & Government Relations, World Vision of Canada

"Dr. Kumar-Misir's Multilingual Information Gathering System demands an approach to overcoming barriers to communication and mutual understanding which is not simply literal, and thus follows in the tradition established by other outstanding Canadians such as Marshall McLuhan." **Jack B. Murta**, Minister of Multiculturalism. Government of Canada.

"I believe that it is fitting that this instrument be included with the Canadian gifts to the Pope, as one of Canada's multicultural contributions to the universal brotherhood of man and promotion of peace, health and harmony among the world's diverse peoples. Because of your own multilingual background, I believe that you will appreciate this gift." To **His Holiness Pope John Paul II,** from **Senator Paul Yuzyk**, Knight-Commander, Order of St. Gregory the Great, <u>Canada</u>.

"I am grateful to participate in one of the fascinating programs designed to allow Korean patients to receive medical care with the use of this comprehensive medical questionnaire."

Bang-Bu Youn, MD, Chairman & Professor, Yonsev University, South Korea

"It is indeed a pleasure and a privilege to assist you in this matter."

Edward C. Tordesalillas, MD, Executive Secretary, The Philippine Academy of Family Physicians, Manilla Philippines.

"I have revised the Arabic translation of MIGS and got it typed, hoping that it will be up to your expectations." **Zohair A. Sebai, M.B., B.S., DrPH**, Professor of Community Medicine, <u>Rivadh. Saudi Arabia</u>

"The Israeli Association of Family Physicians, via Dr. T. Spencer, has assured me that the Association will do its utmost to assist in this project." Max R. Polliack, Professor & Chairman, Dept. of Family Medicine, Tel Aviv University, Israel.

"I would like to confirm my co-operation in this highly interesting project." **Dr. V. Ujhazy**, Director, Cancer Research Institute, Bratislava, Czechoslovakia

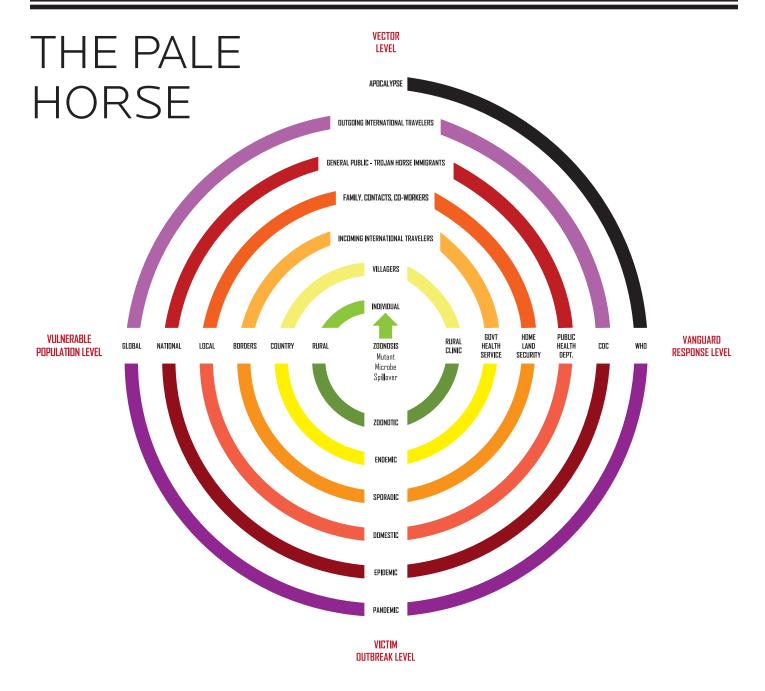
"Having had the Latvian translation completed, I am in a hurry to send it over to you."

Vladimir Panchekhin, International Secretary, Medical Workers Union, Central Committee. Moscow.

"I am well aware of the enormous value of Dr. Kumar-Misir's innovative communication system. I can say with confidence that this system will have a phenomenal impact on the ability of healthcare professionals to perform their duties in a more accurate and comprehensive manner." Paul DeSilva, Film & television producer, Canadian Broadcasting Corporation.

"We believe your **MIGS** represents a major contribution to human communication and intercultural understanding." **Sultan M. Akhtar**, Chairman, Community Relations, Canadian Council of Christians, Muslims & Jews, Ottawa Canada,





UTANT MICROBE SPILLOVER from animals to humans has intermittently devastated humanity and altered geopolitical history.

Recently, in 2002, a DARS virus spillover from a civet cat to a single guest in a Hong Kong hotel, led to a global pandemic. Similarly, the 2013 MERS virus originated from camels in the Middle East. In 2014, a mutant Ebola virus spillover from bats in a hollow tree infecting a playful toddler, led to worldwide panic, and illustrated the lack of preparedness.

Fortunately, their low infectivity spared mankind this time, but not so for the dreaded and inevitable, highly-infectious, killer H1N1 flu virus, which killed 10 million people in

The only quick, cost-efficient and clinically effective way to combat, contain and control the spread of a mutant spillover is by vector

control via Microbial Early Detection and Assisted Medical Isolation (MEDAMI).

To be successful, Vanguard levels must match the Victim, Vector and Vulnerable levels, and be equipped with co-operative, coordinated data-driven responses.

Data collection must be all-inclusive, regardless of literacy, language, location or level of income, by utilizing available information-gathering, and dispensing technology from on-site protected personnel to contact-free interactive computer telephony, websites, mobile applications and video conferencing.

Database development must be proactive, including surveillance of "cured" cases and close contacts, surveys of contaminated communities and screening of the general population in atrisk locations, e.g., borders.

Collected, digitized, real-time, location and clinical presentation data, distributed among the vanguard levels then enables mentoring and standardized database-driven decision-

Case-specific clinical meducation, medication and medical isolation.

Community-specific strategic deployment of scarce physician, physical and fiscal resources.

Country-specific personal and public preventive and curative health policies, protocols and procedures, as well as research to ensure best practices in therapy, protection, de-contamination, waste management and cross-cultural communication.

There is no doubt that modern medicine integrated with today's telecommunication technology, can be innovatively organized at every level to: "stop the viral spiral."





Four Horsemen of the Apocalypse THE PALE HORSE

By Victor Kumar-Misir, M.D.

n November 2012, I had the distinct pleasure of meeting David Quammen, National Geographic writer and author, promoting awareness of the ever-present, apocalyptic threat of 'spillover' global pandemics, including SARS, influenza and biological weapons of mass destruction.

In the third guarter of 2002, local outbreaks of a severe infectious respiratory disease in the South China Pearl River Delta, quickly spread to Hong Kong, and from there, by airplane, worldwide, with thousands of infected patients, hundreds of deaths, and devastated national economies - all within a few months. This represents the first incidence in this century of dreaded zoonotic disease – the spillover of infectious, lethal microorganisms from animal reservoirs to humans, and subsequent human-to-human transmission, which, leading to a global pandemic, can quickly and substantially alter the geo-political, socio-economic landscape of the planet, as has happened in previous episodes of human history.

On November 16, 2002, a 46-year-old male chef in the Foshan region of South China, was exposed to domestic civet cats, and developed a severe respiratory illness that quickly spread to his wife, daughter, and her husband. In December, in nearby Zhonghshan province, 28 similar cases appeared.

On January 30, 2003, Zhou Zuofeng, who had visited Zhongshan, checked in at a Guangzhou hospital with pneumonia, and within 2 days, infected more than 30 healthcare workers. He was transferred to a teaching hospital, and infected the ambulance driver en route, and 23 health care workers.

On February 21, 2003, one such infected healthcare worker, a 64-year-old nephrology professor, Liu Jianlun, went to Hong Kong to attend his nephew's wedding. He checked into the Kowloon Metropole Hotel, Room #911, and infected 16 hotel guests within 1 day. He died on March 04, 2003.

One of the infected guests was a 78-year-old grandmother from Canada, staying in Room #904, across the corridor from him, for only 1 night - February 21, 2003. She then flew home to Toronto, where she became ill, and infected her son. Very quickly, several hundred residents of Toronto contracted the disease, of which 31 died, including her son. The city of over 2 million was plunged into a public health and socioeconomic crisis.

One such Toronto resident, a Filipino nurse attendant, flew home for an Easter visit, checked into a Luzon hospital, causing a major outbreak across the Philippines.

On February 21, 2003, Esther Mok, a Singapore resident, who had flown to Hong Kong on a shopping vacation, checked into the Metropole Hotel, Room #938. She returned to Singapore where she was hospitalized with pneumonia. Very quickly, there were 200 cases, of which 33 died, including Ms. Mok's father, mother, uncle and her pastor. She herself survived. The Singapore officials notified the WHO in Geneva that they had an outbreak of what they termed "severe acute, respiratory syndrome of unknown origin." The WHO adopted

the acronym "SARS," and issued a global travel advisory alert.

A doctor, who had taken a throat swab from Ms. Mok, boarded a plane, on his way to New York to attend an infectious disease conference. A Singapore co-worker, noticing he had respiratory symptoms, notified the Singapore authorities, who in turn notified the WHO in Geneva, which then alerted German officials, who met the plane in Frankfurt and quarantined him. As a result, New York and the United States escaped.

On March 15, 2003, China Airlines Flight #112 was flying from Hong Kong to Beijing, China, with a feverish male passenger. By touchdown in Beijing, 22 passengers and 2 crew members were infected and spread to 70 hospitals, involving 400 healthcare workers, patients and their visitors.

During the same period, a Chinese-American businessman traveled from Hong Kong to Hanoi, resulting in 150 cases in Vietnam. While in Hanoi, he was examined by Dr. Carlos Urbani, an Italian parasitologist, the local WHO communicable diseases expert. He traveled to Bangkok, where he died 12 days later, but had brought SARS to Thailand.

The SARS-CoV, RNA virus reservoir in South China Horseshoe bats, had undergone a mutant spillover from bitten civet cats to humans, and had circled the earth by plane, going global in just a few months, infecting 8098 individuals, 774 of whom died, with devastating costs to national economies, before the contagion could be contained. The last case identified was in Taiwan, on June 15, 2003, prompting Toronto Mayor Mel Lastman to declare "SARS IS DEAD."

But was it? On November 2012, the WHO issued an alert that a SARS-like, contagious syndrome had appeared in Saudi Arabia and Qatar.

But for the fact that the SARS virus was transmitted via large, airborne droplets, only to very close contacts, there could have been a major pandemic. Not so for H1N1 influenza, which killed 50 million people in 1918, 2 million in 1957, and 1 million in 1968.

Are we prepared for the Next Big One? Hell no! "There's still no magical defense, no universal vaccine, no foolproof and widely available treatment, to guarantee that such death and misery don't occur again. So influenza is hugely dangerous, at best. At worst it would be apocalyptic." - So notes David Quammen in his monumental work, "Spillover."

Readers may download and share my free Flu app at the Android App Store. Search for "migsclient" (must be one word). This application does the hard work to help you get best care at home, and when traveling abroad. It is good for influenza, SARS and other respiratory infections. B

Victor Kumar-Misir, M.D., is an international physician, who has spent the past 40 years integrating translingual, cross-cultural healthcare delivery with emerging information-management technologies, with the goal of delivering healthcare to all individuals, regardless of language, literacy, location or level of income.





Four Horsemen of the Apocalypse THE TROJAN HORSE

By Victor Kumar-Misir, M.D.

"Timeo 'DNA' et dona ferentes"

hroughout human history, pandemic microbial plagues have periodically decimated mankind, and historically altered the geopolitical, socioeconomic landscape of the planet. Inevitable bio-disasters – natural or terrorist, e.g., a highly contagious killer flu or a biologic weapon of mass destruction epidemic – will require mass screening of threatened populations to identify and isolate the infected, to prevent spread.

Infected non-English-speaking individuals in today's multilingual communities may not get screened, and therefore would remain unrecognized and not isolated. As many may continue to work – as housekeepers, maids, drivers, gardeners, maintenance workers, etc. they would constitute a veritable microbial host 'Trojan horse' that would then disseminate the pandemic microbe widely, especially in the densely populated commercial and domestic institutions and thoroughfares that characterize most North American cities.

In bio-disasters, mass, **multilingual** medical screening would be <u>crucial</u> for identifying and isolating infected 'Trojan horse' microbial hosts, in order to prevent widespread microbial dissemination and socioeconomic disruption.

However, cost-saving and life-preserving trans-lingual, cross-cultural communication is not as simple as one would imagine and is fraught with unexpected dangers.

As an Emergency Room physician and Family Doctor, permit me to share with you a few of the experiences and lessons I have encountered over the past 40+ years, in attempting to meet this translingual and cross-cultural challenge.

TRANSLINGUAL COMMUNICATION

"What's in a Name?" Names serve to identify individuals, but may also indicate origin. For example, names ending with: '-escu' may pe Romanian, '-deh' Iranian, '-polous' Greek, '-vic' Serbian. Names beginning with: 'Al-' may be Arabic.

Words Can Be Misleading: "Oo" sounds like "No," but means "Yes," in Philippine Tagalog. "Nyet" sounds like "Yes," but means "No," in Russian. In Spanish, "Constipado" sounds like 'constipation," but means "nasal congestion," and "Embarasada" sounds like "embarrassment," but means "pregnancy."

Informal interpreters' disinformation: Bilingual bystanders, often relatives, are dangerous, because of unsubstantiated bilingual proficiency, breach of confidentiality and patient embarrassment. Corridor consultations with non-medical staff, e.g. maintenance, can be more problematic because of misguided confidence. I once trusted a bilingual orderly, who, instead of translating my clinical instructions, was telling patients, in Chinese, that I wanted them to see a herbalist friend of his.

Formal interpreters' misinformation: In 1983, at the Norman Bethune Hospital in China, a Western doctor told the large Chinese audience "In Canada, if a schoolteacher became pregnant out of wedlock, she would be fired." Their best interpreter said "In Canada, if a schoolteacher became pregnant out of wedlock, she would be shot!"

Linguistic Equivalents: The use of dictionaries or computer translations is fraught with literal misinterpretation. In Quebec, "sick to your stomach (nausea)" is not the literal "mal a l'estomac" but "mal au coeur," i.e. a weak heart. Nausea in battle was considered by the Normans, like Richard the Lionhearted, to indicate a lack of bravery, which was thought to emanate from the heart. This was assimilated in the post-1066 English Lexicon as 'courage' and 'coward.' In North Carolina, 'nausea' is "green in the gills," and in Trinidad, it is "bad feeling,"

Conclusion: Trans-lingual communication is not a simple undertaking. In my experience, to be medically accurate in order to avoid serious clinical consequences, one must use my FACTS methodology: Formal translation to be grammatically correct, Acculturated with vernacular linguistic equivalents, Contemporized in the original country, Tested in practice, and Subcultured for specific dialects.

CROSS-CULTURAL COMMUNICATION

Gestures Can Be Misinterpreted

In Bulgaria, tilting the head up and down means "No" (not "Yes,") and sideways means "Yes" (not "No.")

"Hook 'em horns," the University of Texas rallying gesture, in Italy, means that one's spouse is cheating. In Africa, it means levying a curse, but in Venezuela, it is a good luck sign. Showing the sole of your shoe is the ultimate Middle Eastern insult.

"E" means "OK" in the United States. However, in France, it means "zero," and therefore "you are worthless." In Japan, it means "coins," and indicates an offer of bribery. In Brazil, it refers to a private female orifice.

" means "approval," "great," "good job," or "hitch hiking" in the United States. In Nigeria, it is a rude gesture. In a bar in Japan it is the signal for "five drinks," in Germany, "one drink," yet pointing up with the index finger means you are ordering "two drinks."

Conclusion: "Be careful to use culturally-appropriate body language."

The current trans-lingual, cross-cultural communication challenge is local and global, is real and important, and demands our professional response. Bp

Victor Kumar-Misir, M.D., is an international physician, who has spent the past 40 years integrating trans-lingual, cross-cultural healthcare delivery with emerging information-management technologies, with input from physician executives of national academies of medicine in over 30 countries. He has been a media spokesman and key-note speaker in several countries, including the Society for Intercultural Education Training and Research (SIETAR). Fax: (281) 532-4329, email: jmlyon33@earthlink.net