
A presentation of the International College of Dentists

**YOU CAN CHANGE THE WORLD:
VOLUNTEERING CHANGES YOU AND THE
WORLD**

CE Credits: 3 hours



INTERNATIONAL COLLEGE OF DENTISTS

USA SECTION

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You can Change the World:

Volunteering Changes You and the World

A presentation of the International College of Dentists

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Co-Sponsored by the Academy Of Dentistry International (ADI)

The best time to ask a question is when it occurs to you so I will entertain questions right in the middle of the presentation and also give some time at the end for questions as I wrap

things up. No question is silly, in fact, it probably deals with a point that the person sitting next to you wanted to ask, but is too shy to ask.

ICD Video

Hans Rosling's 200 years 200 Countries from youtube

- Oral health conditions around the globe – What is the magnitude of the problem?
- The nature of volunteer activities:
 - Why volunteer? *Who ME?*
 - The nature of the volunteer
 - The nature of volunteering in the context of our culture with a servant's heart
- Cross-cultural issues – This ain't Lubbock.
 - Cross-cultural training and understanding
- Types of projects – service and teaching
 - Giving them a fish vs. teaching them how to fish
 - Star Fish and Star Fishers!
 - Developing networks – relief for long term missionaries
- How to get started
 - Jumping in the water with the sharks and not getting bit
 - Joining existing programs vs. starting one of your own.
- The Nuts and Bolts of volunteering
 - What to do and where to find out more information
 - What it takes
- Volunteering opportunities
 - Where to find them
 - Examples of service projects and teaching projects
- Volunteering right here at home
 - Mission of Mercy Clinics / Remote Area Medical Clinics
 - Community Health and Wellness Free Clinics

1. Oral Health Conditions Around the World – What is the magnitude of the problem?

- World Health Organization -
<http://www.who.int/mediacentre/factsheets/fs318/en/>

2. The nature of volunteer activities

- Why volunteer – the reasons are as varied as the volunteers
 - Desire to give something back . . . or pay forward. Why build a bridge?

- Realization that there is more than going to work, driving the kids to soccer practice, catching that trophy striper or lowering that golf handicap.
 - The desire to be a part of the solution, not a part of the problem.
 - Interest in visiting new places, making new friends, meeting new people and doing something worthwhile at the same time.
 - Support a church or synagogue mission or humanitarian (non-sectarian) service organization.
 - An interest in mutual sharing of knowledge, skills and experience with international colleagues.
 - The desire to participate based on the experiences related by someone with volunteer experience.
 - It's just a fun thing to do.
 - Tourist vs. Guest
 - Having a lasting positive impact on the community, (**sustainability**) whether at home (Mission of Mercy/Remote Area Medical programs/Habitat for Humanity)
 - "Me" projects vs. "us and them" projects.
 - Leave some of who you are at home – your ego, your impatience, and your agenda – know what to leave in the parking lot!!
 - Remember that it isn't the first rodeo for many team members and locals, even if you are on the horse for the first time.
 - Preparation – easy to be prepared for the project, more difficult to be prepared for the location.
- Why **NOT** volunteer – the reasons are volunteers ego-specific
 - Safari – Look what I bagged
 - Self-Promotion
 - Qualities of an ideal Volunteers
 - Culturally sensitive – language, mind set and world view tendencies.
 - Flexible, flexible, **flexible** and have a sense of humor.
 - Prepared for the what ifs: the power goes off? Conditions are not as advertised? All of the equipment/supplies do not arrive?
 - Patient and understanding
 - Relaxed – yes, even you type A personalities
 - Thinks creatively and doesn't complain – you're not back home anymore.
 - Doesn't brag about things in America or promise things
 - Willing to learn (yes you will learn) and also willing to share knowledge, skills and the experience with others.

- Understanding the context you are in, not thinking in context from whence you came
- Challenges on the home front
 - Preparing your practice for the project – consider taking some staff.
 - Make the project part of your practice - preparation
 - Consider making a collage of pictures from the project for the reception area
 - Digital Photo Frame
 - Preparing your family for the project
 - Prepare to take some pictures on the project for the family to enjoy
 - It is your idea but the rest of the family has to be on board and excited about what you are doing.
 - You could make the project a family affair if the site is appropriate. Pros and Cons
 - Being home but not present, maybe you can use Face Time or Skype if possible
 - Returning from the project
 - No one will mistake you for Mother Teresa – plenty of others have participated in missions even though this is your first time.
 - Don't be disappointed if people aren't as interested in your adventures as you expect or you think they should be.
 - Dealing with reentry stress – All Alone in a crowd, you don't seem to fit in anymore, detached, common situations can create unusual feelings, Frustration (no one understands), Anger (materialism reigns and indifference to things that matter to you), Discontentment (the place you left seems more like home – you want to escape).
 - Cross-cultural issues – this is not Lubbock and you are the one with the funny accent and speech.
 - Different customs, different living conditions, priorities and world view.
 - Jet lag and a hot climate without air conditioning and long working days.
 - Initial euphoria at being in and functioning in an alien environment.
 - Irritation and hostility at the situation and conditions. This can be especially pronounced when tired, hot and sick.

- Gradual adjustment and comfort with the local situation.
- Adaptation or biculturalism after having come to an understanding of the situation on local terms, not the volunteers' terms.

3. Selecting a Project and a Site

- With Whom? When? and Where?
 - With whom? - What do I look for in a credible organization?
 - Experienced organization in facilitating mission projects
 - Experienced person to lead the team
 - Financial integrity
 - Cultural understanding and sensitivity of the service area
 - Contacts with significant work you can continue to support
 - Detailed oriented – with orientation for participants
 - Offer missions that fit your skills and interests – a service project or a teaching project.
 - Has locations that fit your adaptability limits
 - Offer a service format with which you are comfortable
 - Group Mission Organization
 - Advantages
 - a. Seasoned and trained leadership and fellowship
 - b. Service in institutional and non-institutional settings
 - c. More self-contained
 - d. Lower cost
 - e. More accomplished – logistics and experience
 - Disadvantages
 - a. Conformity to group schedule – more restrictive
 - b. Often rougher living conditions
 - c. Greater burden on local hosts – larger groups
 - d. May not use your skills as well
 - Going alone, with family or only a few people
 - Advantages
 - a. Set your own schedule
 - b. More time for building relationships, especially nationals
 - c. Often can make it a family experience
 - d. Ideal for teaching and training
 - e. Can specifically tailor a mission to your skills and needs
 - Disadvantages
 - a. More expensive

- b. Many more details and logistical arrangements that need to be made by you
 - c. More intense preparation of supplies and equipment with more limited carriers of goods.
 - d. Don't have an experienced leader who knows the way
- When? – How do I decide when to go?
 - Begin planning far in advance – more distance sites take longer
 - Know weather differences between the USA and service site
 - Evaluate most popular times to go vs. times of greatest need
 - If a family mission vacation times must be evaluated
- Where – How do I decide where to go?
 - The decision is determined by:
 - a. Amount of time you have –more distant sites take longer
 - b. Amount you wish to spend –further sites more expensive
 - c. Your mission interest, burden or type of service
 - d. The political, social and religious stability at the site
 - e. Special licenses, registrations or work permits needed
 - f. Are there appropriate logistics for the mission, ground transportation, safe food and housing, and communication?
 - g. What vaccinations or immunizations are needed – are there any Health Alerts and Warnings for the area?
 - h. What are the needs of the Dental Project and has the project been developed?
 - i. What dental materials and equipment available on site?
 - j. What are customs regulations regarding bringing medications, equipment and supplies into the country?
 - k. Is there a facility available for the clinic and are there interpreters available?
- Assembling the Team
 - One person must ultimately be in charge
 - Responsibilities need to be delegated
 - You cannot talk anyone into going –the decision to go must be personal and independent
 - Remember you want “we” projects, not “us and them” projects
 - Don't over reach –particularly in new projects
- Responsibilities of the Team –Utilizing Nationals
 - Reliable Volunteer interpreters
 - Pre-registration of patients

- Volunteers for crowd control
 - Volunteers to assist at the chair side and giving post-op extraction instructions
 - Volunteers to be trained in washing, disinfecting and sterilization of instruments
 - Volunteers for cooking and performing other tasks as the need arises
- Equipping for the project
 - Service vs. Teaching projects –Project needs may vary
 - Checklists are exceedingly important –check and double checks
 - Electrical requirements -110 V vs. 220 V – plug adaptors, transformer for charging, generators, and compressors
 - Potable water sources –bottled water –filters & purifiers
 - Portable dental units for restorative – Adec, Aseptico, etc.
 - Transportation –Vehicles, Roads and Safety first, second and third
 - Medical Emergency Kit for the team + HIV Chemoprophylaxis kit (listed in supplies check list)
 - Instruments and supplies Checklists, Checklist, Checklists
- How to pay for it all:
 - Private Donations – Patients, family, friends, Church, Synagogue
 - Dental Study Club
 - Donations from Dental Suppliers
 - Foundations
 - Government grants
- How? –What do I need to do to travel overseas?
 - Documents
 - Obtain Passport –How to get passport?
 - a. Go on line or obtain an application from the post office town clerk or court office. You can apply at over a dozen Passport Agencies; in addition, over 7000 public places accept applications.
 - b. Website: www.travel.state.gov/passport/get/first/first_830.html
 - c. Take a copy of the first two pages of your passport and two extra passport pictures with you, but keep them separate in case your passport is lost or stolen.
 - Visas –are required in many countries and need to be obtained from the consulate of the host country.

4. Health Issues:

- Who can go?
 - People in reasonable health of all ages can travel to most sites.
 - Limiting factors – mobility (most developing countries do not cater to disabled), chronic illnesses (heart disease, COPD) – check with your physician.
 - Must keep medications in your carry on. Most medications will not be available in a developing country.
 - There are a limited number of physicians in country with no specialists in rural areas.
- Health Insurance?
 - Check with your insurance carrier regarding coverage. For proper coverage you will need a supplemental policy.
 - Coverage for: Accidental Death & Dismemberment
 - Medical Expenses
 - Disability Income Benefit
 - Medical Assistance Service
 - Emergency Medical Evacuation
 - Crisis Management Service
 - Security Evacuation
 - Family Coordination
 - Repatriation of Remains
 - Personal Property
 - General Liability
 - Possible mission short-term volunteer insurance carriers:
 - Gallagher Charitable International Insurance – www.aaintl.com
 - Good Neighbor Insurance – www.gninsurance.com
- Prophylaxis?
 - Center for Disease Control (CDC) or Health Department Guidelines – www.cdc.gov/travel
 - Recommended immunizations: Hepatitis A, Diphtheria/ Tetanus, Polio Booster (if no booster has been given), Measles (booster if born after 1956 and not pregnant – one time only), Flu shot if over 65, Hepatitis B for healthcare providers if they have never had the complete immunization series. (Up to date on all immunizations.)
 - Considerations (depending on the situation and location): Malaria Chemoprophylaxis, Yellow Fever, Hepatitis B, Typhoid

- Volunteer opportunities
 - Where to find them
 - Word of mouth from friends, professional groups, church missions.
 - ADA – www.internationalvolunteer.ada.org
 - Directory of volunteer organizations – www.hvousa.org
5. Volunteer at home – you don't need a passport to make the world a better place.
 - Community Health and Wellness Centers – sliding scale and free clinics
 - Religious Group or Civic Organization Clinics
 - Rural Medical Clinics
 6. Open Discussion – Questions and Answers
 7. Wrap – up

Online Resources:

- www.icd.org
- www.hvousa.org
- www.internationalvolunteer.ada.org
- www.hesperian.org (Action for Health – Books, etc.)
- www.cmda.org/gho (Global Health Outreach – Medical / Dental teams)
- <http://dentistry.about.com/od/careersindentistry/a/volunteer.htm> (Volunteering at free Dental Clinics)
- <http://www.ramusa.org> (Remote Area Medical / Dental Clinic)
- <http://wwwnc.cdc.gov/travel> (Traveler's health information)

Addendum: Surgical Equipment and Supplies

The necessary types of surgical equipment and supplies will depend on the scope of the project and to a certain extent, the personal preferences of the volunteer dentists. All instruments are usually supplied from the individual's office. It is a rare site that is already set up to treat patients except for the arrival of volunteers. You have to be like a turtle if you will need it you better have it on your back. Here are some sample lists of instruments and supplies for surgical and restorative projects – the amounts will need to be determined by the size of the project and the estimated number of patients that will be seen.

Non-disposable equipment:

- Anesthetic syringes – at least 4 per dentist
- Large and small elevators –Straight, Potts, East –West, Crane Picks
- Root tip picks
- Upper and lower extraction forceps (Universals, Cow Horns, Ash, etc.)
- High Torque Surgical Drill – Battery operated - rechargeable (Such as the Bell Dental Products, Travel Bell, straight and contra-angle handpieces)
- Surgical burs
- Bone chisel, sharpening stone and mallet.
- Rongeurs – small and large
- Periosteal elevators
- Bite blocks (adult and child)
- Scalpel handles and blades (No. 15)
- Mouth mirrors
- Adson (tissue – holding) forceps
- Needle holders and Tissue scissors
- Bone files
- Surgical Curettes
- Large Kelly forceps or Large Instrument Pick-ups for transferring instruments
- Sphygmomanometer and stethoscope

- Large plastic basins for washing, rinsing and disinfecting instruments as well as washing hands
- A headlamp – purchased at camping stores with extra batteries, flash lights with LED lights and extra bulbs and batteries. Rechargeable batteries are not advised. Do not count on buying batteries in country.
- Pressure cooker to sterilize instruments
- Hot plate to work with the in country voltage, plug adaptors or propane operated in country portable stove.

Disposable supplies:

- Surgical hand-washing soap
- Disposable examination gloves in assorted sized
- Sterile surgical gloves in assorted sizes
- Towels in which to wrap instruments for sterilization
- Gelfoam and Surgicel
- Dry socket paste
- Resorbable suture on a cutting needle (3/0 plain gut or chromic)
- 2 x 2s, 3 x 3s and 4 x 4s gauze sponges (lots of sponges also used for blotting no suction)
- Anesthetic needles (27 Long will be used universally - can bring some 30 short for intraligamentary injection)
- Local anesthetic cartridges in assorted types all in date (the World Health Organization prohibits the use of outdated medications)
- Sharps container
- Pressure cooker to sterilize instruments – you will need your hosts to supply some sort of hot plate or propane stove heat source. Instruments should be placed above the water to be sterilized with steam under pressure.
- Cidex for instrument disinfectant to be used as a last resort for 30 min High level disinfection of instruments.
- Betadine –antiseptic solution
- Surgical masks
- Safety glasses
- Plastic trash bags
- Plastic cups to spit into or to use to give PO medicines
- Plastic table cloths to cover work area

- Surgical towels and surgical sheet to cover instruments
- Analgesics (Ibuprofen 600 mg and Acetaminophen extra strength, etc.)
- Antibiotics (various strengths oral and intramuscular types – Amoxicillin, Cephalexin, Clindamycin, etc.)
- Emergency Medicine Kit – (NitroStat 0.4mg, Epinephrine (1:1000 – 1mg/ml & 1: 10,000 – 0.1mg/ml injectable) Diphenhydramine inj. 50mg, Decadron inj. 4mg/cc, Albuterol inhalation Aerosol 8.5g, Diazepam inj. 5mg/ml 10ml, Furosemide tabs. 20mg, Ketorolac Tromethamine 30mg/ml, Lidocaine HCl 1% 10 mg/ml, Dermabond topical skin adhesive, Promethazine HCl 25mg /ml inj., Ondansetron 40 mg/20 ml inj., Alcohol prep pads, band-aids, Oral Rehydration Salts, suture kit, sterile gloves, etc.
- Emergency HIV Chemoprophylaxis Kit – (containing quick HIV whole blood test, and anti-retroviral medications) **Zidovudine** (Retrovir, ZVD, AZT) + **Lamivudine** (Epivar, 3TC) are combined in **Combivir**, one tablet contains 150mg of Lamivudine (Eprivar) +300 mg of Zidovudine (Retrovir). Dosage is one tablet twice daily for adults and children over 12 years old.
- Syringes 3cc and 5cc for the delivery of antibiotics and diphenhydramine, steroids and other medications. (23G x 1”, 25G x 1” needles)

Restorative Equipment and supplies:

- Mouth mirrors
- Explorers
- Headlamp and flashlights
- Cotton pliers
- Spoon excavators
- Cement Spatula
- Amalgam condensers
- Triturator
- Tofflemire matrix retainers
- Matrix bands – Tofflemire and mylar
- Wooden wedges
- Amalgam and composite placement instruments and carvers

- Composite with etchant, primer and bonding agent
- Autopolymerizing and/or light- polymerizing composite
- Composite curing light or wand with spare bulbs and fuses
- Sealants
- Mixing pads
- Rubber dam material with frame, punch, clamps, and clamp forceps
- Pin Kit
- Cotton roll holders
- Cotton rolls
- Finishing strips and lighting strips
- Polishing equipment – Pumice, rubber cups, prophylaxis angles.
- High-speed and low-speed handpieces with push button chucks (bur tools whether air driven or electric tend to get lost)
- Assorted burs with bur block
- Periodontal curettes
- Floss
- Cotton pellets
- Articulating paper
- Patient mirror (Nothing is so rewarding as seeing a patient smile after having some nice composites completed)
- Portable Dental Unit –with compressor and spare parts. Aseptico has a built in compressor. Adec needs an external compressor.
- Portable dental chair – the antigravity lounge chairs work well and are very inexpensive in comparison to a portable dental chair (\$1200 compared to less than \$100)

One of the major challenges in providing optimal care is sharpening our diagnostic acumen without the benefit of some normally available equipment or instruments. Making radiographs can be a problem unless we bring along a portable battery powered X-ray unit such as the Nomad Pro by Arribex it can be used with self-developing x-ray film and also digitally with a viewing screen. They are expensive in the six to seven thousand dollar range. A thorough clinical examination with transillumination using a composite light or penlight and percussion of teeth often will give enough information to properly treat the patient. Although the

service delivered will approach the quality of the services delivered in the dental office at home, there may be compromises due to the local conditions and limitations.

Disinfection and sterilization of instruments also can be problematic. Instruments can be sterilized by boiling, being placed in a pressure cooker, autoclaved, and soaked in bleach, or soaked in a glutaraldehyde sterilant / disinfectant to maximize the chance of breaking the chain of contamination. All instruments need to be meticulously cleaned of all organic material, blood and other material – an enzymatic cleaning solution can be used with a tooth brush and wire brush to achieve this end before sterilization / disinfection. The autoclave or pressure cooker are always the first choice for sterilization.

Having more than one piece of the most essential tools, machines and equipment can be very worthwhile, because if one machine breaks down, the second could be placed into service. When purchasing or acquiring equipment, select the simplest model that can be repaired in the field, and then get the spare parts to fix whichever of them would be most likely to fail. Most portable dental equipment is fairly easy to disassemble and repair with the proper parts and tools. A small toolbox with the following items would be most helpful.

- Flat –headed screwdriver
- Phillips head screwdriver
- Mini-screwdriver set
- Slip joint pliers
- Allen wrench kit (SAE and metric)
- Teflon tape
- Electrical tape
- Plastic tubing for the dental unit (possibly various sizes may be needed)
- One of each valve in the unit, especially for the foot pedal
- Assorted rubber “O” rings
- Assorted box wrenches (SAE and metric) or a Crescent wrench
- Medium Vise-grip
- Electric volt meter/multi-tester
- Tube of grease and handpiece lubricants

Equipment that is stored on-site from year to year in topical areas can deteriorate because of the high heat and humidity. That is especially true of “O” rings plastic tubing, and valves. Parts for dental equipment can be purchased through a local dental supplier or a company such as American Dental Accessories (1-800-331-7993 / www.americandental.com) that sells virtually everything needed to build and repair a dental unit.