

Introduction to  
Special  
Care Dentistry

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Adapted from: NY State OMR&CO - 2011, 2012, 2013

## Objectives

- Explore the history of disability awareness in Cambodia
- Explain what is and the importance of People First Language
- Identify important questions to consider when developing plan of treating patient's dental needs
- Discuss different methods to successfully manage patient treatment
- Identify alternative methods such as sedation to manage patient treatment

## Current State in the United States

- "About 56.7 million people – 19% of the population – had a disability in 2010, according to a broad definition of disability, with more than half of them reporting the disability was severe."

US Census data for 2010 Retrieved on March 15, 2016, from  
<https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html>

## Current State of Special Care Dentistry, Cambodia\*

- We don't have a clear picture of how many Cambodians have disabilities.
- Official statistics change dramatically from survey to survey
- most current survey stating 2 per cent of Cambodians have a disability, down from 8 per cent in 2009.
- The World Health Organization (WHO) states that over 15 per cent of the world has a disability.
- No reason to believe the percentage of people with disabilities in Cambodia is lower than the WHO's statistic of 15 per cent.
- Inconsistent data collection methods and a poor understanding of disability at the village level result in a huge variation in statistics.

\* The Phnom Penh Post: Fri, 20 March 2015

## Disability among General Population\*

- Overall, 10% of household members age 5 and older suffer with at least one form of disability.
- 21% of household members who were ill or injured in the 30 days prior to the interview are disabled.
- The most common types of disabilities reported in the survey are difficulties in seeing, walking or climbing stairs, and concentrating.
- One in 10 men who are not currently employed are disabled, as compared with only 5 percent among other men.

\*Source: United Nations Regional Meeting on disability Measurement and Statistics in support of the 2030 Agenda for Sustainable Development and the 2020 World Population and Housing Programme  
Bangkok, Thailand, 26028 July 2016

## Background

- Cambodia experienced near three decades of civil conflict from the 1970s through to the end of the 1990s, marked by a period of genocide by the Khmer Rouge in 1975-1979
- A history of civil and regional conflicts and current low income country status would lead to increase risk of disability
- The 2008 Population Census counted a prevalence rate of 1.4% of the Cambodian population as disabled from the question, 'if the persons is physically or mentally disabled give the appropriate code' according to categories of seeing, speech, hearing, movement and mental
- The 2014 Cambodia Socio-Economic Survey adopts a functioning based measure of disability: 'Do you have any of the following: difficulty seeing, hearing, speaking, moving, feeling or sensing, psychological or behavioural difficulties, learning difficulties, fits, others? For persons that experience difficulty in any of the nine domains, they are asked a second question: 'Is the difficulty mild, moderate or severe?'
- The 2014 version of the survey returned a disability prevalence of 3.6%

## Objective

- The primary objective of the Cambodia Disability and Health Survey\* (CDHS) is to provide the updated data on infant and child mortality, fertility preferences, family planning behavior, maternal mortality, utilization of maternal and child health services, health expenditures, women's status, and knowledge and behavior regarding HIV/AIDS and other sexually transmitted infections
- This information contributes to policy decisions, planning, monitoring, and program evaluation for the development of Cambodia at both the national and local government levels

\* National Institute of Statistics, Directorate General for Health, and ICF International, 2015. Cambodia Demographic and Health Survey 2014. Phnom Penh, Cambodia, and Rockville, Maryland, USA: National Institute of Statistics, Directorate General for Health, and ICF International.

## Defining Disability

- We adopt a general measure of disability as:
- Persons who experience at least some difficulty in any of the six functioning domains referred throughout the report as 'any disability'
- Persons who experience a lot of difficulty or cannot do in at least one of the six functioning domains, referred throughout the report as 'severe disability'

## Defining Disability

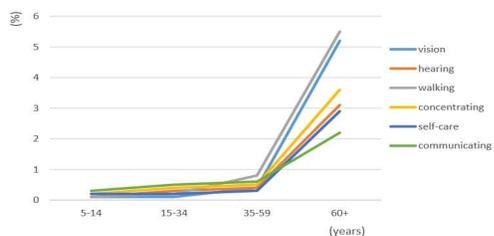
Types of disability	Level of difficulty			
	No difficulty	Yes, some difficulty	Yes, a lot of difficulty	Yes, cannot do at all
Seeing		X	x	x
Hearing		X	x	x
Walking/climbing		X	x	X
Remembering/concentrating		X	x	X
Self-care		X	x	X
Communicating		X	x	X

## Disability prevalence by severity, gender and location of residence\*

	Cambodia			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Disability (any)	9.5	10.4	8.4	9.6	10.6	8.5	8.6	9.2	7.9
Disability (severe)	2.1	2.3	1.9	2.1	2.3	1.9	2.2	2.3	2.1

\* Demographic and Health Survey 2014 The Experiences of Cambodia -the adoption of the Washington Group short set disability questionnaire

## Disability (any) prevalence by type of functioning difficulty, 2014



## Changing Attitudes

- "I felt very sad and did not know why this happened to me because I had seven kids without any problems," "I once thought that it was his fate. Only after he survived the first six months did I start becoming more positive and seeing his strength to live and, possibly, his ability to live just like other kids."
- The extended-family's reaction demonstrated how differently people view disabilities. "My side of the family has been supportive. Some sent us food to feed him others gave us money to support him," said Mon Chan.
- "But my husband's side doesn't understand why we want to take care of him," she said. "They think we should have just 'let him go'. In their view, kids like our son are 'a waste' because they think they just sit at home all day and do nothing. But we don't care about what others think any more."

## Cultural Challenge and Change

- Rosat Math has been working at the Physical Rehabilitation Center in Kampong Cham as head physiotherapist for 4 years. He says that one of the critical issues is that many people focus on the disabilities of people with physical problems rather than their abilities.
- Rosat mentioned that the idea of karma is an additional burden for the disabled. Many Cambodians believe that people with disabilities, especially those born with them, committed sins in their previous lives and are paying for this in their current lives. Thus, a common perception is that nothing can be done for them.
- "Phal Pro Yoch," or reciprocity, is another common social belief which maintains that people must return favours. Because a majority of people with disabilities still live in extreme poverty in Cambodia, they are considered unable to follow the virtue of "Phal Pro Yoch".

## UNICEF AND EPIC ARTS

- UNICEF has continuously strived to change people's negative attitudes towards disability.
- UNICEF works with partners in Cambodia to raise awareness around disability.
- One such partnership is with Epic Arts.
- Epic Arts delivers public performances throughout the country to spread the message of inclusivity no matter whether or not an individual has a disability.
- Epic Arts is an international, inclusive arts organisation based in Cambodia
- We use the arts as a form of expression and empowerment to bring people with and without disabilities together.
- We aim to promote the message that every person counts through our inclusive education, community and social enterprise program We use the arts as a form of expression and empowerment to bring people with and without disabilities together.

**EPIC ARTS BELIEVES TOGETHER WE CAN BUILD A SOCIETY IN WHICH EVERY PERSON COUNTS.**



## Special Care Dentistry

- "Special Care Dentistry is that branch of dentistry that provides oral care services for people with physical, medical, developmental, or cognitive conditions which limit their ability to receive routine dental care."

[www.scdonline.org](http://www.scdonline.org)

## Special Care Categories

- Three major special care categories
  - Intellectual/developmental disabilities
  - Medically complex conditions
  - Geriatrics (vulnerable elderly)

## Special Care Dentistry

- A disability may impact only a small portion of a person's life,
- **But the disability is considered his/her defining characteristic by many other**

## Disabling Conditions

- A disease, disorder or event that produces a long-term effect resulting in disability<sup>2,15</sup>
- Common categories
  - Developmental
  - Sensory
  - Medical
  - Musculoskeletal
  - Neurologic
  - Communicative

## Major Life Activities

- Caring for oneself
- Performing manual tasks
- Walking
- Talking
- Seeing
- Hearing
- Speaking
- Breathing
- Learning
- Working

## Activities of Daily Livings (ADLs)

- Getting around inside the house
- Getting in or out of bed
- Eating and toileting
- Going outside the house
- Preparing meals
- Using a telephone

## Activities of Daily Living (ADLs)

- How does the disability affect patients' ADLs?
- How does the disability affect the patients' ability to get dental care?
  - Ability to get to appointments
  - Sit in the dental chair
  - Perform necessary OH

## Developmental disabilities

- "Impairment(s) in physical or mental abilities that are manifested before 22 years of age, are likely to persist indefinitely, and result in functional limitations in major life activities."
- Four major developmental disabilities
  - Intellectual disability
  - Autism
  - Cerebral Palsy
  - Epilepsy

## Unique Challenges

- Requires oral health professionals to have extraordinary training, empathy, patience, and the desire to be successful

Glassman & Subar (2009) Dent Clin, N. Am

## Modification and adaptation

- Providing dental services to a patient from this segment of the population may require modification of routine or standard behavior management modalities and alteration of treatment protocols to accommodate the individual's impairment

Stiefel, D. Special care Dentistry (2002)

## Treatment Modalities/Planning

- Every patient, with or without a disability, is an *individual*.
- What may work for one patient or one practitioner may not work for another
- If a patient is treated on a different day, by the same clinician with the identical treatment, "it may not work"; *OR* the same treatment by another clinician is delivered on the same day "it may work"

## How much do I need to know?

- Can't know every thing about every condition but should have "the knowledge and experience to gather and apply the information (you) need. "
- KNOW WHERE & HOW TO FIND IT!

Glassman & Subar 2009

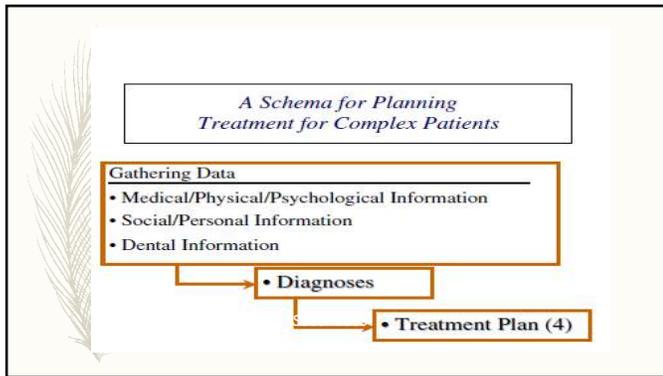
## No person is an island

- Provider must have training and ability to function in **health care teams**
- Consultations with
  - physicians
  - social workers
  - general and social service professionals

## People First Language

The handicapped/disabled	People with disabilities
mentally retarded	Person with cognitive delay
My son is autistic	My son has autism
She is Downs/mongoloid	She has Down Syndrome
Birth defect	Congenital defect
Wheelchair-bound, confined to wheelchair	Uses a wheelchair
She is developmentally delay	She has a developmental delay

Snow K. People first language. Available at: <http://www.disabilitysnatural.com/peoplefirstlanguage.htm>. Accessed September 1, 2007.



## You need to ask questions!

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- Medical information
- What is the disability, long and short term prognosis?
- What medications are being taken and what are the side effects?
- How severe is the disability?
- Is the patient having dental pain?
- Would dental treatment improve the person's life?

## Dental Information

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- Are there any dental abnormalities associated with the disability (Down's Syndrome)
- What considerations are there for treating these abnormalities
- What other dental problems exist?
- How does the person's disability affect delivery of dental treatment?

## Dental Treatment

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- What modifications are necessary?
- What precautions do we need to take?
- How does the disability affect the maintenance of oral health?
- Is it possible to teach the patient or caregiver to help with oral health?
- What is the prognosis for the future?

## Treatment Plan

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- What, when, where and who for each of the following:
  - Emergency Treatment
  - Preventive Plan
  - Initial Treatment
  - Future Treatment

## Caregivers

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- "Special challenges presented by working with someone where communication and even procedures need to be performed by a third person"

Glassman and Subar 2009

## Partial participation

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- Patients may have limited physical ability to perform oral hygiene procedures
- Patient does as much as they are able to, but caregiver ensures that needed OH is accomplished

## Order of data gathering

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- Emphasis on medical, physical, and psychological information; social and personal information; and finally dental information
- Designed to "counteract the tendency of dentists to focus on dental history and problems first"

## Communication

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- Social/personal consideration
- Individual's ability to understand, communicate, and perform procedures
- Understand patient's support system
- Who is willing and able to help maintain patient's OH?

## Managing expectations

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- What does patient expect/want/need?
- What about the expectations of caregivers, guardians, and family members?

## Less is More?

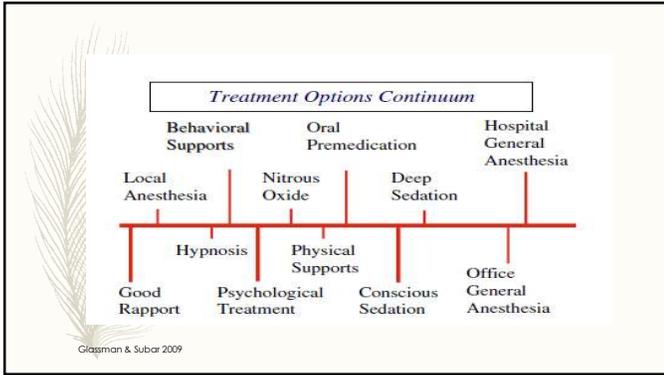
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- Not all dental problems need treatment
- Solution may be worse than the problem
- Take the "long view" and see "the big picture" of the person's life

## Least Restrictive Environment

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- Continuum of care options
- Begin with least "restrictive" – usually this is the option where the patient can participate most easily



### Environment

- An important source of behavior management is a non-threatening environment
  - Music, visual distractions, scenery, colors, videos, television, etc. all contribute to a positive atmosphere
  - Calm music and pleasant scenery may promote a sedate environment
  - However, loud music and "wild" scenery/video may be effective as a distractive environment

### Attitude

- TLC, empathy, touch, massage, singing are all examples of ways to make the dental visit pleasant and keep the patient calm
- Be patient, understanding, and engaging
- It's not only *what we do to the patient*, but also **how** we do it .

Source: Steifel, D 2002

### Proper Timing

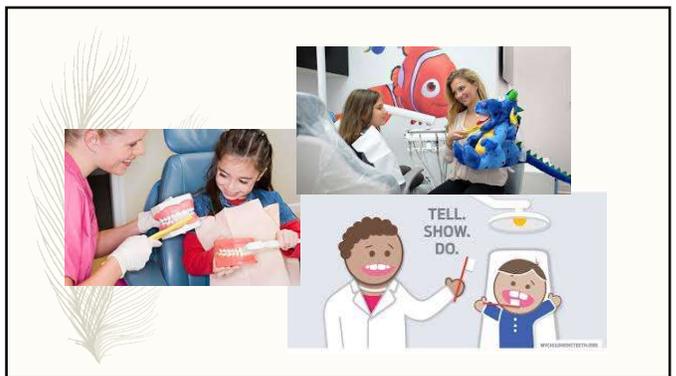
- Treat the patient at the appropriate time of day according to that individual patient's need
- Most patients do better in the morning, but some may not be "morning people"

Source: Steifel, D 2002

### Tell-Show-Do

- Must be **age appropriate** for the patient's development and level of understanding
- Some patients show increased cooperation if they are shown instruments, allowed to hold them, etc.
- Perhaps a mirror and blunted explorer or x-ray film could be sent home with the patient.

Source: Steifel, D 2002



## Psychological Techniques

- Positive reinforcement
- Desensitization: Let patient take mirror, x-ray film, impression tray home
- Start visits out slowly, have the patient return frequently
- Negative reinforcement should generally not be used (no "yelling" at patients!)

AAPD ref manual 2006-7

## Physical Restraint

- **Medical Immobilization / Protective Stabilization**
  - A protocol combining physical immobilization with pharmacological sedation is often utilized depending on the needs of the individual patient and the needed dental treatment
  - Appropriate restraint is used when needed to protect patient, practitioner, and staff from injury
  - To reduce untoward movement
  - To assist in delivery of optimum dental treatment

Stetler, D 2002



## Physical Restraint

- **Medical Immobilization / Protective Stabilization**
  - Must follow applicable laws and regulations
  - Partial or complete immobilization
  - May be an adjunct to pharmacological restraint
  - Performed by dentist, staff, guardian
  - With or without immobilization device

## Physical Restraint

- **Medical Immobilization / Protective Stabilization**
  - Use physical restraint only when other less restrictive methods are insufficient
  - Use the least restrictive method
  - Gentle stabilization
  - Must cause no injury
  - Informed consent needed
  - Documentation

## Methods of Stabilization

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>■ Parent/ caregiver on chair holding patient on lap</li> <li>■ Staff holding patient</li> <li>■ Patient on dental chair with parent/caregiver on lap</li> <li>■ Staff member holding patient's head</li> </ul> | <ul style="list-style-type: none"> <li>■ Dentist cradling patient's head under arm</li> <li>■ Papoose board</li> <li>■ Velcro wrist restraints</li> <li>■ Sheet immobilization</li> </ul> |
|---|---|

Cornick, Patel & Puglise 2000

## Other Approaches?

Think and act "outside the box."  
Consider any and all approaches.

## Reasons for Sedation

- Nature of treatment
- Extent of treatment
- Behavioral resistance
- Anxiety

AAFP reference manual 2006-7

## Developmental Disabilities

- A term commonly used in the US to describe life-long disabilities
- Attributable to mental and/or physical or combination of mental and physical impairments
- Occurs during the developmental period
  - Manifests before age 22
  - Often present at birth
- Includes intellectual disability, cerebral palsy, epilepsy and autism

## Causes of Developmental Disabilities

- Brain injury or infection before, during or after birth
- Poor diet and health care
- Drug misuse during pregnancy
  - Including excessive alcohol intake and smoking
- Growth or nutrition problems
- Abnormalities of chromosomes and genes
- Extreme prematurity
- Child abuse<sup>1</sup>

## Intellectual Disability

- "A disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills that originates before the age of 18"<sup>19</sup>
- **Most common developmental disability**
- **6.2-7.5 million people**
- **87% of person with ID have mild impairment**
- **Cause of deficit is usually unknown**

## Cerebral Palsy

- Non-progressive, non-inherited disorders caused by brain damage
  - Prenatally or during birth
  - Hypoxic injury most common cause
- Affects body movement, posture and muscle coordination.
- 1.5-2.0 million children and adults in US
  - 10,000 babies and infants diagnosed annually.
- May or may not be accompanied by intellectual disability

## Epilepsy

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- Brain disorder characterized by recurrent seizures
- More than 2,000,000 people in US
  - 100,000 new cases/year
- Trauma, infections, developmental disorders
- One of the most common secondary disabilities in people with intellectual disability
  - 20-30% of patients with cerebral palsy
  - 1/3 of persons with profound intellectual disability<sup>21,22</sup>

## Autism Spectrum Disorder

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- Neurologic lifelong development disability
- Number of people with autism increasing
  - In 5-15/10,000 births in 1990
  - In 2007, the Centers for Disease Control reported that 1 in 150 children is diagnosed with autism
  - IN 2010, CDC: 1 in 68!!
- Disturbances
- Developmental rates
- Responses to sensory stimuli
- Capacity to relate to people, events, objects
- Speech and language patterns<sup>23</sup>

## Sensory Disabilities

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- Often co-exist with other developmental disabilities
- Interference with impulses from the external world
  - Visual impairment – 7,327,800 in US (2.3%)
- Hearing impairment
  - Most prevalent disability in the US
  - 11.1 million people (3.5%)

## Musculoskeletal Disabilities

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- 1.5 million non-institutionalized people in US use wheelchairs
- Back or spine impairments
- Very common among elderly
  - Lower extremities and hips
- Paralysis
- Cerebrovascular accidents (strokes)
- Spinal Cord Injury
- Missing Extremities

## Long Term Considerations

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- How will home care be performed in the future?
- Will the pt be able to care for dental prostheses?
- Will pt. be able to establish and keep recall appointments?
- Which course of treatment is most likely to result in pt's ability to have a lifetime of oral health?

## Complex Restorative

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- Sometimes "less is more"
- Might require maintenance procedures beyond the individual's capability
- Actually reduce the possibility of an individual maintaining optimal oral health
- "Keep it simple"

## Home Care

- Simply providing "oral hygiene instructions" is UNLIKELY to change caregiver or patient behavior
- "Interventions designed to improve patient and caregiver knowledge are much more effective when paired with demonstration and mentoring activities."

Glassman & Miller 2006

## Start slowly



- Performing less demanding procedures may give you idea about the patient's ability to tolerate more complex treatment

## Barriers to Care – Motivational

- Many patients are unable to comply with oral hygiene instruction
- Difficulty in keeping scheduled appointments
  - General level of health may be fragile
  - *Frequently too ill to keep scheduled appointment*
  - May be dependent on someone to get them to care
- Combination of poor oral hygiene and a pattern of many broken/missed appointments may lead dentists to be more likely to extract teeth rather than restore

## Normalization in the US

- Until the 1960s
  - Children/adults with mental retardation and physical disabilities were routinely denied an education
  - Many were isolated in institutions
  - Those who were at home were kept out of public eye
- Rehabilitation Act of 1973, Section 504
  - Guarantees that no otherwise qualified person be discriminated against in the areas of education, employment or social services including health care by reason of a handicap

## Americans with Disabilities Act (ADA)

- Prohibits discrimination on the basis of disability
  - Employment, public services, public accommodations, commercial facilities and telecommunications
- Services to individuals with disabilities must be offered in the most integrated setting appropriate to the needs of the individual
  - Includes dental offices

## Conclusions

- People First Language is used when talking about individuals who have special needs
- Asking questions and collecting the proper information from caregivers and family about the patient can significantly help with the management of treatment
- Many methods to manage dental treatment in patients with special needs include: positive reinforcement, environmental (ie. music, same provider/time of day, etc), and physical restraint
- If all minimally invasive methods are not successful, sedation can be explored as a possible alternative for patient management

## Resources

- Epic Arts/UNICEF
- <http://epicarts.org.uk>
- Grace House Community Center
- Mission Statement: "Enabling the community to become sustainable through education, family support and health care."
- <https://www.gracehousecambodia.net/>
- Special Care Dentistry Association
- [www.scdonline.org](http://www.scdonline.org)

## Thank you



- Please feel free to contact with any questions
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