



Cindy Gatens, MN, RN, CRRN-A
Clinical Instructor, Department of Physical
Medicine, The Ohio State University College
of Medicine

**Physical, social and emotional issues and strategies surrounding
sexual dysfunction**

Academic and Professional Education

- 1979 - 1980 University of Washington, Seattle, Washington Master of Nursing, Physiological Nursing Nervous System Pathway
- 1967 - 1971 University of Missouri, Columbia, Missouri Bachelor of Science in Nursing
- 1989 - 1999 CRRN, Certification in Rehabilitation
- 1998 - Present CRRN-A, Certification in Advanced Practice Nursing in Rehabilitation

Academic Appointment

- 1991 -Present Clinical Instructor, Department of Physical Medicine The Ohio State University College of Medicine

Current Position

Clinical Nurse Specialist, The Ohio State University Medical Center, Dodd Hall, Columbus, Ohio

Responsible for educational programming on rehabilitation nursing practice and quality patient care for patients with spinal cord injury, traumatic brain injury, stroke, orthopedic injury, and other neurological deficits. Consultant to primary nurses and rehabilitation interdisciplinary team members in Dodd Hall's 60-bed rehabilitation facility and throughout OSUMC for clinical rehabilitation problems and program development. Independent consultation for patients with bladder, bowel, skin care, and sexual health issues.

Honors And Awards

- 1998 Recipient of The Ohio State University Distinguished Staff Award.
- 1992 - 1995 Portraits in Professionalism Award, The Ohio State University Medical Center,
Department of Nursing
- 1994 Recipient of Excellence in Patient Education Interdisciplinary Team Award as a
member of the Stroke/Orthopedic Rehabilitation Team.
- 1991 Disabled Professional Woman of the Year, Pilot Club of Columbus, Ohio.
- 1990 - 1993 Recipient of 1990, 1991, and 1993, Award of Excellence in Patient Education.
The Ohio State University Medical Center.

Cindy Gatens has performed research, has made numerous presentations and is widely published in the area of rehabilitation for patients with spinal cord injury, traumatic brain injury, stroke, orthopedic injury, and other neurological deficits.

Cindy Gatens, MN, RN, CRRN-A
4170 Randmore Court
Columbus, Ohio 43220

**Transverse Myelitis Association
Children's & Family Workshop**

**Facilitating Sexual Health
For
Children & Adolescents
With
Transverse Myelitis**

**Cindy Gatens, MN, RN, CRRN-A
Clinical Nurse Specialist
Dodd Hall, The Ohio State University
Medical Center**

**Columbus, Ohio
July 19, 2002**

***Facilitating Sexual Health
for
Children and Adolescents
with
Transverse Myelitis***

***Dimensions
of
Sexual Health***

- **Self Image/Self Concept**
- **Sexual Relationships/Partnerships**
- **Sexual Functioning**

***Self Image
&
Concept***

- **Beliefs that we hold in relation to ourselves (Ideal self, body image)**
- **External factors (clothing, friends, jewelry, jobs, recreation)**

***Partnerships
and
Relationships***

- **Activities with others**
- **Roles**
- **Communication**

Sexual Functioning

- **Ability to give and feel pleasure**
- **Participation in sexual activities**
- **Reproduction**

***Sexuality Across the Life
Span***

- **Not an “adults only” activity**
- **May produce anxiety for parents**
- **Emphasis on sex roles, understanding the body, socialization skills**

“Research findings indicate that students who understand their sexuality and the responsibilities that go with it are less likely to encounter sexual troubles than students who are uninformed”.

Johnson & Kempton, 1981

Sexuality Education Program Content should include information on responsible sexual behavior

- Social Skills
- How to avoid being sexually exploited
- Appropriate body exposure
- Privacy of sexual behavior
- Responsibility of sexual behavior including abstinence
- How to prevent pregnancy

Important Issues for Parents of Kids with Disabilities

- Parents must be open/comfortable with topic of sexuality
- Social graces are developed and learned - not inborn
- Kids/adolescents should know how to tell others of their disability

Issues for Kids Exploring Their Sexuality

- Struggle to place the disability in proper perspective
- Demystify sexuality
- Develop a positive body image
- Learn needed social skills
- Understand sexual functioning

Sexuality Education Content for Parents of Kids with Disabilities

- Parents should demonstrate acceptance of child's body
- First experience with love and socialization will be provided by parents and siblings
- Social relationships with friends/siblings should be encouraged
- Children need to learn role behavior of same sex parent
- Sexuality information is shared related to child's age

Sexual Information for Children and Adolescents

- Ages 5 -8 years
- Ages 8 - 11 years
- Ages 12 -18 years

Sexual Information for 5-8 Years

- Correct names of body parts and their functions
- Differences and similarities between girls and boys
- Elements of reproduction and pregnancy
- Qualities of good relationships (friendship, communication, respect, love)
- Decision making skills/All decisions have consequences
- Beginning of social responsibility, values, morals
- Masturbation can be pleasurable, but should be private
- Avoiding/Reporting sexual exploitation

Sexual Information for Ages 8 - 11 Years

- Females should be taught about menses and males about nocturnal emissions
- Signs and variability of puberty
- Sexuality as part of total self
- Information on reproduction and pregnancy
- Importance of values in decision making
- Communication within family unit about sexuality
- Masturbation
- Abstinence from sexual intercourse
- Avoiding and reporting sexual abuse
- STDs including HIV/AIDS

Sexual Information for Ages 12-18 Years

- Health maintenance (breast exams, testicular exams)
- Sexuality as part of total self (communication, dating, love, and intimacy)
- Masturbation should be practiced privately
- Importance of values in guiding one's behavior
- How alcohol and drug use influence decision making
- Expressions of sexuality
- Birth control and responsibilities of childbearing
- Reproduction
- Role of condoms in disease prevention - pros and cons

Non Disabled Kids Get Information from Many Sources

- Peers at school, playground, school restroom
- Swap information/share experiences
- Free access to magazines/reading materials

Kids with physical disabilities are often dependent on adults (parents) or health care workers

“Disabled youngsters do need to be given sex education. After all, they have to cope with the physical changes of puberty as well as the emotional changes. They may well have anxieties about their future and need reassurance that they are sexual people who can form relationships with others. They need the information to enable them to cope with and enjoy their sexuality.”

Davies, 1996

Physiologic Aspects of Sexual Response

- For NORMAL sexual response, all parts of nervous system have to be connected and in balance.
- Psychologic desire must also be present for successful sexual performance

Central Nervous System Control Over Sexual Functions

- All human behavior controlled by CNS (sex)
- Brain controls the nervous system
- No specific "sex center in the brain"

Sexual Desire and Perception of Sexual Pleasure are mediated by several areas in the brain

- Movement
- Sensation and perception
- Cognition
- Attention and general affect

The brain exerts influence over the spinal cord

Spinal Cord contains "sex center" in lumbosacral area

- (Women) Entire LS area is involved in coordinating nerve impulses to and from genitalia
- (Men) Sacral segments S2, S3, S4 control erection and lumbar segments L1, L2, L3 control ejaculation

The peripheral nerves relay impulses between the spinal cord and genitalia and between the spinal cord and rest of body. (Physical changes during sexual response cycle).

Physiology of Erection/Vaginal Lubrication

- Psychogenic
- Reflexic

Psychogenic Erections

- Mental images or fantasy
- Impulses travel via autonomic nervous system
- Brain through spinal cord to lower thoracic and upper lumbar levels
- Fibers leave the spinal cord and travel to blood vessels in penis and vagina/clitoris
- Vascular engorgement and lubrication

Reflexic Erection

- Local stimulation to genitalia or sacral nerves
- Sensory impulses travel to spinal cord
- Connect with motor neurons
- Causes reflex vascular engorgement and lubrication

Sexual Dysfunction **Primary**

- Changes in sexual feelings and response directly related to the neurologic SCI
- Decreased libido (sex drive)
- Changes in sensation
- Decreased vaginal lubrication
- Problems achieving/maintaining erection
- Reduced ejaculatory force or ability
- Change in orgasmic response
- Change in fertility (men)
- Changes in menstruation (women)

Sexual Dysfunction **Secondary**

- Results from symptoms that may be caused by Transverse Myelitis
- Pain
- Fatigue
- Spasticity
- Bowel and Bladder Problems

Sexual Dysfunction **Tertiary**

- Effects caused by psychologic responses to the effects of Transverse Myelitis
- Poor Self Esteem
- Poor Self Image
- Social Isolation

Management Strategies: **Decreased Libido**

- Identify cause (anxiety, stress, depression)
- Treat cause (counseling, stress management, medications)

Management Strategies: **Sensation Changes**

- Self or partner exploration
- Use of vibrator
- Identification of new erogenous zones
- Non-erotic stimulation

Management Strategies: **Decreased Lubrication**

- Water-soluble lubricants (K-Y Jelly, Replens)
- Hormone replacement therapy (estrogen) at menopause

**Management Strategies:
Achieving/Maintaining
Erections**

- Use of vibrator
- Self/partner stimulation
- Vacuum erection device
- Penile implants
- Medications

**Medications for
Achieving/Maintaining
Erections**

- Viagra
- Prostaglandin E (suppository into penile opening of urethra)
- Papaverine (injected into shaft of penis)

**Management Strategies:
Pain/Spasms**

- Identification of cause (spasms, positioning, nerve pain).
- Gentle range of motion or massage (foreplay)
- Medication for spasms, neuropathic pain
- Attempts at different positions

**Management Strategies:
Fatigue**

- Pain Control
- Planning sexual activity for highest energy time
- Energy conservation

**Management Strategies:
Bowel/Bladder Problems**

- Bladder emptying prior to activities
- Indwelling catheter management
- Bowel program (specific consistent time)
- Pre-plan how to manage accidents

**Management Strategies:
Psychologic Responses**

- Focus on attributes
- Identify as a sexual person
- Communicate feelings to partner/therapist
- Solicit help for personal care
- Focus on Relationships

Relationship Factors that Affect Sexuality

- **Communication**
- **Maintaining Trust**
- **Self Concept/Self Image**
- **Love**
- **Romance**
- **Intimacy**
- **Fantasy**

The transition from childhood to adolescence to adulthood is challenging for all children - but becomes a more difficult process for the child with a disability - and for the child's family.

- **Develop trusting relationships**
- **Learn socially appropriate behaviors and acceptable norms**

- **Develop a positive body image/self esteem**

A child's early experiences related to disability can influence future adjustment to any residual limitations, development of self esteem and relationships and career choices.

Cindy Gatens, MN, RN, CRRN-A
Clinical Nurse Specialist
Dodd Hall
The Ohio State University Medical Center

*Sexual Health Bibliography
Children & Adolescents with Transverse Myelitis*

A Guide and Resource Directory to Male Fertility Following Spinal Cord Injury/Dysfunction (2001). Amador, Maria; Lynne, Charles; & Brackett, Nancy L. (eds).

Anderson, Karl-Erik. (1994). Pharmacology of Erection: Agents Which Initiate and Terminate Erection. Sexuality and Disability. 12: (1) pp. 53-79.

Baker, Emily and Cardenas, Diana. (May 1996). Pregnancy in Spinal Cord Injured Women, Archives PM&R. Vol. 77. P. 501-507.

Basile, Guido and Goldstein, Irwin. (1994). Medical Treatment of Neurogenic Impotence. Sexuality and Disability. 12 (1) p. 81-94.

Cole, Sandra S. & Cole, Theodore, M. (1993). Sexuality, Disability, and Reproduction Through The Lifespan, Sexuality and Disability. 11 (3): 189-205.

Davies, M. (1996). Sex education for young disabled people. Adopting and Fostering. 10 (1): 38-40.

Ducharme, Stanley. (2000) Sexuality and Spinal Cord Injury. The Rehabilitation of People with Spinal Cord Injury, 2nd edition. Nesathurai Shander, ed. Blackwell Science, Inc.

Geiger, Robert C. (1979). Neurophysiology and Sexual Response in Spinal Cord Injury, Sexuality and Disability 2 (4): 257-266.

Guest, Graham V. (2000). Sex Education: A Source for Promoting Character Development in Young People with Physical Disabilities, Sexuality, and Disability, 18 (2): pp. 137- 142.

Johnson, W. R., Kempton, W. (1981). Sex education and counseling for special groups (2nd edition), Springfield, IL: Charles C. Thomas.

Kreuter, Margareta; Sullivan, Marianne; Siosteen, Agneta. (June 1996). Sexual Adjustment and Quality of Relationships in Spinal Paraplegia: A Controlled Study, Archives PM&R. Vol. 77, pp. 541-547.

Kroll, Ken and Levy Klein, Erica (1995). Enabling Romance: A Guide to Love, Sex, and Relationships for the Disabled. Woodbine House, Inc., Bethesda, MD.

Krotoski, Danuta; Nosek, Margaret; Turk, Margaret. (1996). Women with Physical Disabilities: Achieving and Maintaining Health and Well-Being. Paul H. Brookes Publishing Company. Baltimore, Md.

Pendler, B., Hungsburger, D. (1991). Sexuality: Dealing with Parents, Sexuality and Disability 9 (2): p. 123-129

Slater, Lee (February 1999). Viagra – Does it work with Spinal Cord Injury, New Mobility. p. 45-47.

Taleporos, George, and McCabe, Marita (2001). Physical Disability and Sexual Esteem, Sexuality and Disability, 19 (2): 131-148