INNOVATION

Pediatric Telepsychiatry: An Effective Alternative to Traditional Face-to-Face Treatment

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Pediatric Telepsychiatry

- Interactive Televideo Communication (ITV): interaction of 2+ individuals using electronic means to share information in real time
- Telemedicine: use of ITV for direct patient care
- Telepsychiatry: use of ITV to provide or support clinical psychiatric care
  - Broader terms: Telemental health, mental telehealth
  - Ex: diagnostic interviews, medication management, crisis evaluation, consultation, and supervision
Child Stats & Workforce Shortage

- ~20% of US children have mental health care needs
- 20-25% of these children receive treatment
- Inequitable distribution of specialists
- Mental health needs often addressed by PCP
- 85% of children on psychotropic medication receive prescriptions from PCP
- 2009: 7,000 child and adolescent psychiatrists
- 2005-2009: Psychiatric APNs (ANCC exam or recert)
  - 1126 Child and Adolescent CNSs
  - 1097 Family PMHNPs
Conceptual Framework: Diffusion of Innovations

- Everett Rogers
- “Process by which an innovation is communicated through certain channels over time among the members of a social system.”
Five Attributes of Innovations

- Relative Advantage
- Compatibility
- Complexity
- Trialability
- Observability
Relative Advantage

- **Accessibility**
  - Telepsychiatry increases access for underserved areas since geographical barriers are removed
  - Locations such as detention, schools, reservations
  - Improves timeliness

- **Pediatric interest in technology ("fun factor")**
  - Qualitative study (Boydell, Volpe, & Pignatiello, 2010)
    - Use of the technology was the “best part”
    - Reported by many to be “cool”
    - Less anxious because they are not in same room
Relative Advantage, cont.

- Cost effectiveness
  - Systematic review included 3 articles estimating costs to be less for telepsychiatry (Pesamaa et al., 2004)
  - Cost minimization study: 1/3 reduction mostly due to patient travel and hidden costs (Smith, Scuffham, & Wootton, 2007)
  - Cost evaluation study: sizable savings; more in subsequent years (Trott & Blignault, 1998)
  - Infrastructure and staffing costs vary among locations (Pesamaa et al., 2007)
Relative Advantage, cont.

- **Treatment outcomes**
  - F2F vs. ITV: Diagnosis and treatment the same in 96% of cases (Elford et al., 2000)
  - Greater reduction in depressive symptoms for tele-CBT group than F2F control group (Nelson, Barnard, & Cain, 2003)
  - F2F & tele-CBT sessions for children with depression showed symptom remission with no statistical difference in response rate (Nelson, Barnard, & Cain, 2006)
  - Statistically significant improvement between initial tele-evaluation and at 3 months using Child Behavior Checklist (Yellowlees, et al., 2008)
Compatibility

- Pediatric Telemental Health Practice Guidelines
  - Practice Parameters for Telepsychiatry with Children and Adolescents
  - American Telemedicine Association’s Practice Guidelines for Videoconferencing-Based Telemental Health

- Telehealth Nursing Guidelines
  - ATA: Telehealth Nursing Definitions & White Paper
  - International Competencies for Telenursing
  - Competencies for Telehealth Nursing
  - Telehealth Nursing Practice Administration and Practice Standards, 4th ed.
Compatibility, cont.

- **Satisfaction**
  - Vast majority of published research addresses satisfaction
  - Telepsychiatrists: with technical support and experience, feel comfortable with ability to develop therapeutic relationships and provide quality care
  - Referring providers: increased access to mental health expertise, enhancement of childhood mental health knowledge, and decreased feelings of isolation
  - Families: satisfied with treatment and reduced travel time
  - Potential negatives: perceived impersonal nature of telecommunication and technical difficulties
Compatibility, cont.

- Insurance reimbursement
  - Medicare
    - Location: HPSA, demonstration project, non-MSA
    - Psychiatric diagnostic interview examination (90801)
    - Individual psychotherapy (90804-90809)
    - Pharmacologic management (90862)
  - Medicaid
    - http://www.telehealthlawcenter.org/?c=128
  - Private Payers
    - Many states require private insurers to include telehealth services (LA, CA, OK, TX, KY)
Compatibility, cont.

- Malpractice coverage
  - Example: TelMed @ www.telmedinsurance.com

- Environmental setting
  - Sound, lighting, camera location, background, activities/space for children

- Privacy issues
  - Informed consent, encryption, HIPAA

- Special population considerations?
  - Age, Developmental disabilities, diagnosis
Complexity

- Different state laws/regulations re: telemedicine
  - Center for Telehealth & E-health Law
    - www.telehealthlawcenter.org or www.ctel.org
  - American Telemedicine Association
    - www.americantelemed.org
- Lack of interstate licensing for practitioners
  - Exception: NCSBN—Nursing Compact
- Some situations may require F2F consultation
- No central location for APNs re: telepsychiatry
Complexity, cont.

- Technology training and technical support
  - Telecommunication Technology
    - Analog telephone systems, digital systems, internet
    - Bandwidth: amount of data that travels through a communications network in a fixed amount of time
      - Preferably 384 kilobits per second (kbit/s) or higher
  - Equipment: monitors, cameras, microphones, speakers, computers
    - ATATelemedicineDirectory.com
Trialability & Observability

- Opportunities to experiment with the technology before committing to adopting it
  - Free trials of products and programs
  - Academia
  - Conferences and other trainings
- Paucity of published articles or other observable involvement in pediatric telepsychiatry by psychiatric nurses
Future Plans

- Needs assessment
- Legal considerations
- Financial feasibility
- Reimbursement
- Services provided
- Read guidelines
- Attend trainings
- Policy & Procedures
References

References