Teaching Parenting Skills One Resident at a Time

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History

- The benefits of Parent Child Interaction Therapy (PCIT) are well documented in the literature
  - Treatment benefits of PCIT found to generalize to child's behavior at school[1]
  - Treatment benefits found to generalize to non-target children in the home [2]
  - PCIT gains maintained up to 3-6 years post treatment [3,4]

History (cont)

- PCIT has been found to be effective with physically abusive parents:
  - 110 physically abusive parents randomly assigned to PCIT, PCIT (enhanced) and standard community parenting group
  - In a 2.5 year follow up the PCIT parents had a 19% re-report rate versus a 49% re-report rate for the community parenting group[5]

History (cont)

- Parental concerns regarding behavior:
  - Up to 50% of parents express concerns about their child's behavior[6]
  - Approximately 20% of school age children exhibit externalizing behavior problems; most common mental health problem among this age range[7]
- Pediatricians identified by parents as a source for parenting advice[8]

Pediatricians' role

- Pediatrician has unique role
  - due to early and ongoing contact with children/caregivers able to identify families in need of effective parenting skills[7]
- Pediatricians less likely to address behavior/discipline based on their:
  - perceived self-efficacy,
  - effectiveness of counseling
  - attitude about its importance[9]

CARE workshop

- Child Adult Relationship Enhancement (CARE) workshop
  - Evidence informed 6 hour workshop
  - Teaches core PCIT principles
  - CARE workshop developed by Cincinnati Children's Hospital Trauma Treatment Training Center for non-clinical adults

PCIT and CARE Comparison

PCIT	CARE
Child Directed Interaction (CDI)	*Part I*
“DO” skills or PRIDE skills	“DO” skills or “P’s and Q’s”
Praise (labeled)	Praise (labeled)
Reflect	Paraphrase(Reflect)
Imitate	Point Out (Describe)
Describe	
Enjoy	

PCIT and CARE

PCIT *CDI*	CARE *Part I*
AVOID skills	AVOID the 3"Q's"
Questions	Questions
Commands	Quash the need to lead (commands)
Critical statements	Quit-negative talk, (avoid words such as quit, no, don't , stop and not)
Strategic Ignore	Strategic Ignore

PCIT and CARE

PCIT

Parent Directed Interaction (PDI)

Giving Good Commands

Time Out sequence

CARE

Part 2

Giving Good Commands

Broken Record (activity to reinforce Giving Good Commands)

***CARE workshop was modified (mCARE) to provide information regarding administering effective Time-Outs.**

Example of Time out teaching

- Keep the Time Out command simple and remain calm
- Time out should:
  - be located where the child can see you
  - see that you are not angry
  - see what they are missing
- When it is over, IT IS over, quiet hands, quiet feet and quiet mouth
- Remember the adult's behavior is always center-stage
- For Time Out to work Time In has to be present!!!

Hypothesis

- Providing training for residents in the form of mCARE workshops will improve their attitudes, self-efficacy and self-reported clinical practice as well as their demonstrated skills with regard to use of effective adult-child interactions

Study Objectives

To determine the effect of participation in the mCARE workshop on the pediatric residents':

- ***beliefs***, ***self-efficacy***, and ***reported clinical practice*** with regard to use of effective adult-child interactions
- ***ability to utilize*** effective adult-child interaction skills

Study Concept & Design

- Single-site study utilizing a pretest-treatment-posttest design with a single convenience sample
- Participants were 2nd and 3rd year pediatric residents
- Intervention: three 2-hour mCARE Workshops that took place over three months (September, October and November of 2010).

Measurements

- Each participating pediatric resident completed a pre-survey, post-survey and 6 month follow-up survey.

- The residents also participated in a pre and post video assessment of their CARE skills with a 3-5 yr old child volunteer.

Survey Instrument

- **Initial Pre-/Post-test Survey included 40 items with 5-point Likert scale (1=Strongly Agree to 5=Strongly Disagree)**
  - **Pilot tested with a group of trainees *similar* to the target population**
  - **Principle component analysis has confirmed the theoretical framework**
  - **6 items were dropped due to low/cross loadings**

Final Survey Instrument

- 34 Items with 5-point Likert scale
  - 19 Items related to “Beliefs”
    - 6 factor structure
  - 8 items related to “Self-efficacy”
    - 3 factor structure
  - 7 items related to “Clinical Practice”
    - 3 factor structure

Sample Questions - Beliefs

F1. Beliefs about the interaction between positive parenting skills and child related factors -- 4 items

"A parent's success in using positive parenting skills is independent of the child's"

1. genetic make-up
2. temperament
3. cognitive level
4. personality

F2. Beliefs in sensitivity for pediatrician's role addressing PCI -- 3 items

1. It is an invasion of privacy for a pediatrician to ask parents about discipline techniques they use with their children.
2. It is demeaning for a pediatrician to ask parents about discipline techniques they use with their children.
3. It is offensive for a pediatrician to ask parents about discipline techniques they use with their children.

Sample Questions

- **Self-efficacy**

Factor 1. SE in Modeling behaviors -- 3 items

"I feel comfortable modeling to a parent how to:"

1. praise a child for good behaviors during a pediatric encounter

2. give a child good command during a pediatric encounter

3. ignore a child's negative behavior during a pediatric encounter

- **Clinical Practice**

Factor 2: Communicating with parents about observed problems with PCI -- 3 items

"As a pediatrician, I have asked parents about difficulties with behavior management when I have seen a parent :"

- **respond to child misbehavior by yelling**
- **respond to child misbehavior by using physical force**
- **reward negative child behaviors (ex Parent gives child candy when child has a temper-tantrum)**

Assessment of Videotaped CARE Skills

- Two therapists independently coded each videotape using the Dyadic Parent-child Interaction Coding System (DPICS) .[11]
- Therapists were blinded to pre-/ post-intervention status of the skills assessment.
- The reviewers assessed for the presence of residents performing the 3 “Do Skills” and the 3 “Avoid Skills.”
- The two reviewers discussed any discrepancies in their coding to come to a consensus.

Statistical Analysis

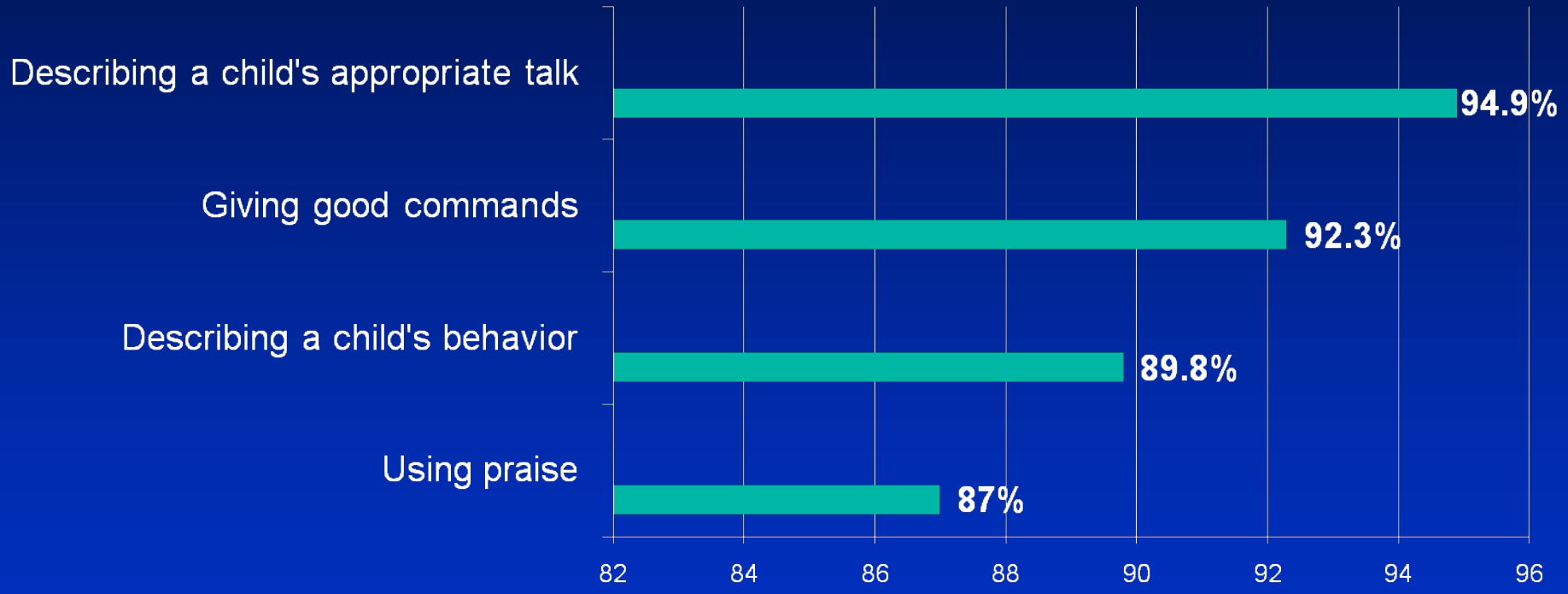
- Descriptive statistics were reported for overall effectiveness of the workshops – follow-up questions
- Independent Samples Mann-Whitney U Test was used to compare pre/post-test survey responses
- Paired samples T test was used to compare pre/post-test Videotaped PCIT Skills

Results

- Total of 39 pediatric residents (21 PGY2, 18 PGY3) were included for descriptive statistics regarding follow-up questions.
- Twenty-two residents were included as paired-samples for videotaped mCARE skills assessment.

Results

I have learned new approaches that I have not previously used…



84 % I used my CARE skills Daily or Weekly
82% I feel comfortable implementing the CARE skills on my own
92% The elements of giving good commands can be useful to me as a Pediatrician

Results - Pre/Post-test Survey

Significant improvement in Beliefs

- It is a pediatrician's role to discuss parent-child related issues:
  - discipline techniques with families,
  - that it is not an invasion of privacy, demeaning or offensive.
- Parent's expectations of pediatricians to discuss parent-child related issues:
  - quality of the interaction,
  - discipline used in the home,
  - child's behavior.

Results - Pre/Post-test Survey

Significant improvement in Self-efficacy

- Reported comfort level in modeling behaviors taught in the CARE Workshop
  - including praising children,
  - ignoring negative behaviors,
  - giving good commands to children.
- Residents' ability to access resources to help parents who struggle with how to discipline their children
- Residents' comfort level in discussing parent-child issues with parents

Results - Pre/Post-test Survey

- **Significant improvement in self described clinical practice**
- **Residents' modeling of parent-child interaction skills to parents including;**
  - **giving good commands,**
  - **positive praise,**
  - **ignoring negative behavior and**
  - **using TIME-OUT effectively**
- **Residents' communication with parents about observed problems noted during the office visit.**

Results – 6 month Follow-up

- Included only those items pertaining to self-efficacy and clinical practice,
- Results were similar to post-test
  - No statistically significant decay was noted in the results

Results

Table 1: *Paired Samples t Test Results: Reviewers' Consensus Scores for Overall "Do Skills" and" Avoid Skills" Demonstrated in Pre-test vs. Post-test Videotaped Performance*

Category	Pre-test			Post-test			T-test
	N	M	SD	N	M	SD	
Do Skills	22	1.52	1.26	22	4.50	2.33	t = 5.98 p = 0.000*
Avoid Skills	22	7.67	4.05	22	1.67	1.45	t = -6.65 p = 0.000*

* Denotes a statistically significant difference at the 95% confidence interval.

Results

Table 2: *Paired Samples t Test Results: Reviewers' Consensus Scores for "Do Skills" Sub-categories Demonstrated in Pre-test vs. Post-test Videotaped Performance*

Do Skills	Pre-test			Post-test			T-test
	N	M	SD	N	M	SD	
Praise	22	0.45	0.96	22	3.41	2.50	t = 5.01 p = 0.000*
Paraphrase	22	3.27	3.17	22	5.41	4.82	t = 2.33 p = 0.030*
Point out	22	0.82	0.85	22	4.09	3.53	t = 4.29 p = 0.000*

* Denotes a statistically significant difference at the 95% confidence interval.

Results

Table 3: *Paired Samples t Test Results: Reviewers' Consensus Scores for "Avoid Skills" Sub-categories Demonstrated in Pre-test vs. Post-test Videotaped Performance*

Avoid Skills	Pre-test			Post-test			T-test
	N	M	SD	N	M	SD	
Question	22	20.95	11.94	22	4.05	3.76	t = - 6.65 p = 0.000*
Command	22	2.00	1.77	22	0.91	1.07	t = - 2.42 p = 0.025*
Negative Talk	22	0.50	0.21	22	0.50	0.21	t = 0 p = 1

* Denotes a statistically significant difference at the 95% confidence interval.

Conclusion

- mCARE workshops seemed to be effective for improving pediatric residents attitudes, self-efficacy and self-report clinical practice as well as their demonstrated skills with regard to use of effective adult-child interactions

Limitations

- Group size was small
- Survey participants not identifiable
  - Impossible to match pre/post/6 month follow up responses by participant
  - Some completed the post survey did not complete the pre survey and not everyone completed the 6 month follow up
    - 36 completed pre survey
    - 39 completed post survey
    - 31 completed 6 month follow up
    - 22 completed pre/post video assessment
- Six month follow up is a short time span and may not be long enough to establish mCARE's benefits over time

Future Considerations

- Adapt mCARE workshop for the advanced professional
  - Provide resident with skills to initiate discussions on parenting and describe importance of social/emotional bond on parent-child relationship
- Assess the mCARE skills of the practicing pediatrician with patients/families
- Potential to assess for child maltreatment reports with the mCARE trained pediatrician

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