



THE UNIVERSITY OF TEXAS  
MD ANDERSON  
CANCER CENTER

# Family Resiliency and Functioning Among Families with APC-Positive Children

Susan K. Peterson, Ph.D., M.P.H.  
Department of Behavioral Science

# Family Resiliency Model

---

- ❑ Positive behaviors that buffer the impact of stressful life events
- ❑ Enables families to maintain or restore their sense of well-being after suffering misfortunes
- ❑ Depends on how individuals respond to stress and also how family interacts with each other to manage stress

**McCubbin & McCubbin, 1996**

# Family Resiliency – Relevance to FAP

---

- ❑ More resilient families may be better able to manage health and psychological stressors of FAP over the life cycle
- ❑ Less resilient families may have difficulty adhering to surveillance or chemoprevention, and less family support for doing so
- ❑ Children from less resilient families may lack the competence to manage their own health care needs as they move into adulthood

# Study Aim

---

**To evaluate family functioning variables that contribute to family resiliency in parents of APC mutation-positive children who were evaluated for a phase I pediatric chemoprevention trial.**

# Study Design and Recruitment

---

- ❑ Phase I chemoprevention trial for APC + children, age 10-14
- ❑ Parents and children completed questionnaires during first clinic visit
- ❑ Sites - Cleveland Clinic
  - M. D. Anderson Cancer Center
- ❑ 19 families completed questionnaires - 35 parents, 20 children

# Outcome Measures

---

## **Family Hardiness** (20 items)

Ability to buffer against stressors by viewing them as a challenge, having commitment to work together, & having sense of internal control

## **Family Problem-Solving Communication** (10 items)

Whether family communication in response to stressors is incendiary (inflammatory) or affirming (supportive)

## **Family Coping Coherence** (4 items)

Acceptance of unexpected difficulties & ability to reframe problems in a positive way

## Parents' Demographic and Medical Characteristics (N=35)

	% (N)
Mean age (range), years	41 (31-55)
Ethnicity - White	83% (29)
Married to child's other parent	74 (26)
Mother	54 (19)
Education $\leq$ High school	34 (12)
Income $<$ \$50,000	37 (13)
APC mutation-positive	37 (13)
Parent of APC+ boy	43 (15)
Personal history of desmoids	14 (5)
Personal history of cancer	11 (4)

# Mean Scores on Family Functioning Measures (N=34)

<u>Measure (range)</u>	<u>Mean (SD)</u>	<u>Norm (SD)</u>	<u>Number with Scores &gt;1 SD below norm*</u>
<b>Family Hardiness (0-60)</b>	<b>50.2 (5.4)</b>	<b>47.4 (6.7)</b>	<b>1</b>
<b>Challenge subscale (0-18)</b>	<b>14.4 (2.2)</b>	<b>12.8 (3.0)</b>	<b>1</b>
<b>Commitment subscale (0-24)</b>	<b>20.9 (2.6)</b>	<b>19.5 (3.2)</b>	<b>3</b>
<b>Control subscale (0-18)</b>	<b>14.9 (2.3)</b>	<b>13.6 (2.6)</b>	<b>3</b>
<b>Problem-Solving Communication (0-30)</b>	<b>22.9 (4.0)</b>	<b>22.7 (4.7)</b>	<b>3</b>
<b>Family Coping Coherence (5-20)</b>	<b>16.7 (2.4)</b>	<b>15.8 (2.3)</b>	<b>4</b>

\*n=12 persons from 11 families

# Characteristics of Parents in “Worse Functioning” Families (n=34)

	Worse Functioning Families	
<u>Demographics</u>	<u>%</u>	<u>P</u>
Age <40	80%	0.05
Ethnicity - White	62	0.58
Married to child’s other parent	62	0.75
Education ≤ High school	67	0.59
Income <\$50,000	62	0.84
<u>Medical</u>		
APC mutation positive	77	0.12
Parent of an APC + male	87	0.01
History of desmoids or cancer	68	0.07

# Logistic Regression Predicting Characteristics of Parents in “Worse Functioning” Families (n=34)

	<u>OR</u>	<u>P-value</u>
<u>Demographics</u>		
Age <40	2.9	0.25
<u>Medical</u>		
Parent of an APC + male	8.7	0.02*
History of desmoids or cancer	4.4	0.24

# Conclusions

---

- ❑ **Most parents reported levels of family functioning that were comparable to healthy populations.**
- ❑ **We identified a subgroup of families who may benefit from support to strengthen their ability to cope with and manage stressors, especially related to FAP.**
- ❑ **Certain ‘risk factors’ that may reflect FAP burden could threaten family resiliency: younger age, history of desmoids/cancer, having male children.**

# Conclusions

---

- ❑ **Seeking chemoprevention for FAP-affected children may be a characteristic of resilient families.**
- ❑ **Does the experience of coping with FAP actually improve resilience and family functioning for some families?**
- ❑ **Phase III chemoprevention trial will provide an opportunity to systematically evaluate impact of resiliency and functioning on surveillance and chemoprevention adherence in families with FAP**

# Collaborators

---

**MD Anderson Cancer Center  
Houston, Texas**

**Martha Askins, PhD  
Patrick Lynch, MD, JD  
Bobbi McGivern, MS  
Leslie Schover, PhD  
Beatty Watts, MS**

**Cleveland Clinic Foundation  
Cleveland, Ohio**

**Carol Burke, MD  
James Church, MD  
Hennie Hasson, RN**

**National Cancer Institute  
Bethesda, Maryland**

**Ernest Hawk, MD**

---

**Sponsored by the National Cancer Institute, National Institutes of Health, N01-CN-05126-02 (P Lynch, PI) and Pfizer, Inc.**