MedCrave
Step into the World of Research

Journal of Psychology and Clinical Psychiatry

Research Article

Open Access

CrossMark

# Cognitive behavioral perspective on how to curtail children's fears of surgery

## Abstract

The moment a patient is admitted to a hospital for surgery, certain factors such as life pressure with negative behaviors and emotions involved fear, anxiety and surgery declining. The problem exacerbates when the patient is a child depicting lack of sleep, and rejection of medical treatment as a whole not to mention the disregard of the physician's directions. Other negative behaviors include withdrawal, bedwetting, intense fear, and bursts of anger. Professional practice in hospitals rely on a working team of inter-disciplinary with the importance of the social worker in the transitional period. The team adopts several professional models to enable disorder interventions in children. One common model utilized is the Cognitive Behavioral Therapy an effective treatment of mental disorders, in particular social disorders. Summarized in the abstract is the present research problem, identifying program indicators reducing children's fears of surgical intervention through Cognitive Behavioral Therapy (CBT).

The study considering the following: the first question is what are some children's disorders due to surgical intervention? In addition to the second question, what are the indicators prevalent in a program designed to reduce children's surgical intervention using the Cognitive Behavioral Therapy?

The present research is one of the basic research types providing basic information on phenomena and problems examined by researchers to find answers to theoretical questions. Results provided answers to research questions after review of related literature and previous studies. The researcher has concluded that it is of great importance to identify children's disorders related to surgical intervention with details of the suggested program to reduce and eliminate such fears using Cognitive Behavioral Treatment.

**Keywords:** fear, surgical operations, cognitive behavioral therapy (CBT)

Volume 11 Issue 6 - 2020

Kaltam Jabor MD Alkuwari
Associate Professor of Social Work, Department of Social Sciences, Faculty of Arts and Sciences, Qatar University, Qatar

**Correspondence:** Kaltam Jabor MD Alkuwari, Associate Professor of Social Work, Department of Social Sciences, Faculty of Arts and Sciences, Qatar University, Qatar, Email alkawarik@qu.edu.qa

**Received:** September 23, 2020 | **Published:** November 19, 2020

## First research problem

Health care teams are aware of a reality related to informing a patient of undergoing a surgical operation, that is the series of disorders and fears entailed by the patient family and friends. The problem exacerbates when the patient is a child, knowing the impact of such medical intervention on developmental stages and the child's welfare in general. Despite the fact that a surgical operation could be the ultimate solution to save a patient's life, he or she is frequently overcome with disorders and fear that might hinder the potential recovery.

Pediatric surgery is a unique discipline as it is unlike other surgeries, (i.e) neurological, orthopedic, cardio – theoretic ones, targets a certain developmental age, namely childhood. Childhood is crucial for the ensuing changes mental, social and psychological aspects contributing to growth and maturity later on. Meanwhile major surgeries for children require special attention on the part of the operating team in the hospital.[1]

Further, major surgeries arouse common fears gripping both the patient and their families some of which are misgivings about what might go wrong in the operating room, with potential death hanging over. Such feelings intensify particularly within free of charge hospitals, the surgery is performed by an obscure doctor.[2] On the other hand, fears and disorders accompanying surgical operations can be classified into the following:[3]

1. **Prior surgery disorders**

These may be in the form of psychological ones (e.g restlessness and tension, sleeping problems), along with physical disturbances such as irregular heartbeats, headache and trembling of children).

2. **Post – surgery disorders**

These are related to the termination of a surgical intervention.

Alternately, professional practice in health care, is based on dynamics within different specialties, underpinning number of forces and interactions thus making the entire process rest on teamwork. Social work is expected to play a key role in health care area to alleviate the level of surgery – related fears. Green affirms that the attainment of desired goals, and quality services are led by the effective part practiced on the part of social workers helping patients and their families understand realities surrounding health care providers, thus operational- zing the medical treatment.[4]

Field studies and research conducted stress the objectives and professional practice of social work in general and how the individual is provided the proper service, to enhance negative perceptions held by patients afflicted with chronic diseases. To this end, professional practice of social workers is based on various professional models with therapeutic methods assisting in the improvement of feelings among chronic disease patients as well as alleviating fears from surgical intervention.

Professional intervention by a social worker when dealing with a child undergoing a surgical operation from the individual service method perspective is based on multiple therapeutic approaches attempting to curtail fears from a surgical operation. Cognitive – Behavioral therapy (C.B.T), is a recent approach utilized by the

researcher to manifest the harmony between C.B.T and development features among children particularly during teen – aging, to emphasize the effective practice of C.B.T with children.[5]

The problem of the present research tackles the determination of certain indications to alleviate fears among children from surgical intervention as cited by social work professional practice perspective on cognitive – behavioral therapy.

## Second: importance of the research

1. Indications of the purposed program by the researcher to alleviate fears among children from surgical intervention using cognitive – behavioral therapy, are evidence – based. This should help enhance effectiveness and competence of social workers with pediatric surgery hospitals.
2. The proposed program is expected to increase effectiveness of pediatric medical treatment.

## Third: objectives

Provide a professional intervention program to alleviate fears of children from surgical intervention.

Support the status of social workers within the Qatari hospitals, through emphasizing the practice of cognitive behavioral therapy in the Arab world as a whole.

## Fourth: research questions

1. What are the children's disorders due to the surgical intervention?
2. What are the indications of the proposed professional intervention program designed to alleviate children's fears from surgical intervention using the cognitive behavioral perspective?

## Fifth: theoretical orientations

Theoretical orientations are a number of general variables that may be termed basic conceptions, to help determine indications of a professional intervention program designed to alleviate children's fears from surgical intervention, using cognitive – behavioral therapy perspective these elements are summed up as follows

1. Fear
2. Surgical intervention
3. cognitive – behavioral therapy.

## Sixth: methodology

The present research is categorized as basic research sometimes named rule research or critical research. These studies provide basic information on phenomena and problems, examined by researchers interested in providing scientific cognitive contributions to formulate answers to theoretical questions.

## Seventh: research steps

Research results provide the answers for the study questions, the researcher relied on the following steps to find the answers:

**Step no. (1):**

Determination of data bases the aim of this step was to find the appropriate evidence as defined by the competent and professional entities, the most significant data bases used to compile the scientific evidence cited above are as follows:

1. www.libraryauckland.ac.nz. Data base affiliate to university of Auckland, New Zealand.
2. www.cochrane.org. it is considered one of the most important data bases concerned with publications on evidence – based professional practice in the field of health care.
3. www.socialcareonline.org.u.k. a critical data base concerned with evidence – based professional practice in The United Kingdom on social work and social care
4. www.q.n.l.qatar. National library of Qatar, it has a special section on social studies.
5. http://stv1.ev/c.edu.eg./eu/c association of Egyptian universities libraries.
6. www.istss.org. special site on evidence – based therapy for "post – traumatic stress disorders"
7. www.guideline.gov. Data base providing scientific evidence on healthcare.

**Step no. (2): Determination of scientific evidence:**

The researcher conducted a review of related literature and previous studies for the master and doctoral degrees on children's disorders related to surgical operations. The evidence covered the following dimensions:

**1st dimension:** Arabic scientific evidence the following studies for the master and doctoral degree submitted by Arab scholars were examined:

1. Mohamed Ahmed Mahmoud Khattab, Maha Ismaiel Al- Helbawy (2015) " Discrepancies prior to and after surgical intervention for or the don tic patients, Quasi – experimental study, published research, "Psychology counseling magazine, psychotherapy center, Ain – Shams University, vol (42), Apr.
2. Mona Aziz Gobran Ibrahiem (2012) "effectiveness of a cognitive – behavioral program in alleviating social and psychological problems of open – heart surgery patients, master's degree thesis, not published, individuals service department faculty of social work, Helwan university
3. Nour Saied Al Saied (2011) "Levels of anxiety and depression prior to a surgical operation, relevance to the type of operation, other demographics among a sample of cardiology patients hospitalized in Oman city, master's degree thesis, psychology department, faculty of higher studies, Jordanian university.
4. Hoda Gallal Abdul Wahab & Mona Moh. Heed (2009) "Effectiveness of a counseling program for the alleviation of children's fears prior to surgical operations, published research, psychology counseling magazine, center of psychotherapy, Ain – Shams University, vol. 23.
5. Zattar Nour Al-Din (2009) "Effectiveness of a proposed Islamic psychotherapy program for the anxiety alleviation prior to a surgical operation master's degree thesis, not published, psychology department, faculty of arts & science, social sciences, moh. Khodair university Bokra, Algeria.
6. Rafat Abdul Rahman Moh. Moh. (2007) "Practice of a professional intervention program from the perspective of social work to curtail children's fears among children " published research

**Citation:** Alkuwari KJMD. Cognitive behavioral perspective on how to curtail children's fears of surgery. *J Psychol Clin Psychiatry.* 2020;11(6):160–164. DOI: 10.15406/jpcpy.2020.11.00691

7. Mohamed Tayib Abdul Razik Hakimy (2002) "Cardiac systems disorders during the surgical operation, master's degree thesis, not published, anesthesiology and resuscitation faculty of medicine, Damascus university.
8. Mohamed Ahmed Naboulsi (1996) "Psychological aspects in plastic surgery for congenital deformations among abnormal children ", published, "psychology culture magazine, center for psychological and psycho – determatology studies, Lebanon, V.26, 7th issue
9. Ryad Ahmed Al- Nabalsi (1953) "Surgical operation trauma and death delusions ", published psychology culture magazine center for psychological, and psychosomatic) physio. Psychological studies, Lebanon vol.14, 4th issue.
10. Kebrial Al- Saba's (1992) Psychosomatic and surgery, surgical operation anxiety "published, psychological culture magazine, center for psychological and psycho somatic studies, Lebanon, vol.12, 3rd issue.
11. Ryiad Ahmed Al Nabolsi (1991) "Surgery and psychological accidents, center for psychological, psychosomatic studies, Lebanon, vol. 6, 2nd issue.
12. Maysaa Ahmed Al- Naieyal "Discrepancies in anxiety and death fears prior to a surgical operation and afterwards" published research, psychological studies magazine cairo , Arabic translated studies by psychologists association, vol.2 1st issue.
13. Nermeen Effat Youssef (1983) "Emotional responses to referral of children into surgery hospitals, "master's degree thesis, not published, higher studies institute for childhood, Ain- Shams University.
14. Sania Mohamed rizk Al – Banna (1982) "Impact of child's psychological state during inpatient treatment, role played by a nurse to cope with the situation" dissertation, not published, faculty of nursing, Cairo university.

**2nd dimension:** foreign scientific evidence the researcher reviewed a number of valuable English studies containing

**Scientific evidence as follows:**

1. Mc Murtry et al. (2011) " children's fears during procedural pain, preliminary investigation of the children's fear scale, health psychology, vol.30 (b) Nov. 780 – 788
2. Zeev N. Kain & Others (2007) Family – entered preparation for surgery improves preoperative outcomes in children: A Randomized controlled trial, anesthesiology, vol. 106
3. Zeev N. Kain & Others (2002) Social adaptability, cognitive abilities and other predictors for children's reactions to surgery, journal of clinical anesthesia, vol. 12, issue 7
4. Mark G. Gabriel & others (2017) The psychosocial experiences and needs of children undergoing surgery and their parents, a systematic review, journal of pediatric health care.
5. Thomas Hackmann & Others (2017) Accuracy of children's preoperative memories, Aorn journal, volume 105, issue 6
6. Hironobu Veshima & Hiroshi Otake (2018) Clinical experiences of erector spinal plane block for children, journal of clinical Anesthesia volume 44.
7. Olga Brooms et al, (2015) Two years after epilepsy surgery in children, Epilepsy & behavior, volume 57
8. Anand Alladi (2013) Current status of minimal access surgery in children, Apollo medicine, volume 10, issue 4.

## Eighth: research results

The afore mentioned steps helped find answers to research questions. Analysis of scientific evidence developed by the researcher of data bases (in both Arabic and English), revealed the following answers:

**Answer to Q. (1):** first research question was " what are the children's disorders due to surgical operation?"

The researcher found that the most significant disorders experienced by children due to surgical intervention are the emotions expressed: by children referred to in patient section of the hospital. These are manifested in the following situations:

Situations (1): prior to the surgical operation these are emotions experienced by inpatient children and expressed prior to the surgical operation, in the following dimension:

**Dimension no (1):** Explicit Knowledge and thoughts: these are determined through the following indications:

1. Fear of death.
2. Thought son rejection of surgery.

**Dimension no (2):** behavior and actions: these are determined in the following indications:

1. Sleep problems.
2. Pre- surgery anxiety

**Dimension no (3): physical disorders:**

These are determined in the following indications:

A. Breathing distress.
B. Digestive disorders.
C. General disorders.
D. Circulatory system disorders.

**Situation no. (2): post-surgery disorders**

These are the child's emotions referred to inpatient department, they are shown after the surgical operation in the following dimensions:

**Dimension no. (1): cognition and explicit thoughts:** They are determined through the following indications:

1. Side effects of anesthesia and injuries.
2. Delusions and surgery after – shock.

**Dimension no. (2): behavioral actions**

These are determined through the following indications:

1. Post – surgery anxiety.
2. Not following the doctor's instructions

**Dimension no. (3): physical disorders**

These are determined in the following indications:

1. Breathing disorders
2. Digestive disorders

**Citation:** Alkuwari KJMD. Cognitive behavioral perspective on how to curtail children's fears of surgery. *J Psychol Clin Psychiatry.* 2020;11(6):160–164. DOI: 10.15406/jpcpy.2020.11.00691

3. Circulatory system disorders
4. General disorders

The somatic disorders experienced before and after surgery are determined in the following.

A. **Respiratory system disorders:**

These are experienced as:

1. Tachy ponoea
2. Brady ponoea
3. Sighing respiration
4. Adventitious sounds including coarse repetitions and fine crepitations

such disorders are measured and quantified through the stethoscope given that normal breath rate is >10 or <25 a minute, or through simple radiography or tomography detecting physiological system or psychological causes.

B. **Digestive disorders: these are**

1. Nausea
2. Vomiting
3. Diarrhea
4. Constipation

Such disorders are measured through routine checks by the medicating doctor along with ultrasound scanning to detect causes of these disorders physical or psychological.

C. **Circulatory system disorders**

1. Palpitation
2. Heart rate: irregular pulse, this is measured by the stethoscope, electro cardio – gram with heart throbs estimated within one minute to be low >60, 60–80 average and <80-<100 is high.

D. **General disturbances:**

Using the Celsius thermometer (centigrade scale).

1. Sweating
2. blood pressure disorders.

## Answer to Q. (2)

The present research second question is "what are the indications of professional intervention program to alleviate children's fear of surgical operation from a cognitive behavioral therapy perspective? Having reviewed related data bases, the researcher the conclusion that cognitive – behavioral therapy is the perfect model available to curtail fear among children from surgical operations. Consequently, the following reveals indications of the proposed cognitive behavioral therapy program:

Objective of the professional intervention program: a major objective of the program is to alleviate children's fears of surgical operations as follows:

## Pre-operative goals

a. Curtail death fears.
b. Curtail misbelieves about refusal to undergo surgery.
c. Limit behavioral manifestations of pre – operative anxiety.
d. Limit physical (somatic) disturbances (shortness of the breath, digestive distress, circulatory system disorders).

## Subsidiary goals post-surgical operan such as

a. Restrict negative thoughts on side effects of the anesthesia.
b. Restrict delusional thoughts on relapse or recurrence.
c. limit behavioral anxiety related to post surgery.
d. Reduce lack of compatible at morpheme with the doctor's instructions.
e. Lessen physical (Somatic) disturbances (like those of pre – operatives).

## Time and place of professional intervention program practice

Practice of the proposed intervention program may take place throughout pediatric hospitals in the Arab world before and after surgical operations.

Working team of the professional intervention program, consists of social worker, the assigned doctor, a nurse.

Tools used to evaluate results of the professional intervention program.

1. Observation of behavioral signs of fear guide.
2. Clinical evaluation tools used by the assigned doctor.
3. Analysis of the child's self – reports.

**Stages of the professional intervention program:**

Assessment phase: through the use of a cognitive functional approach.

This is subdivided into the following:

1. Identification of the problem.
2. Prioritization.

Phase no. (1) (e.g identification of the problem) begins prior to the application of the proposed professional intervention program, using tools (e.g test measurement observation form). Phase no. (1) is completed with phase no. (2) (e.g prioritization) during the first interview held between the social worker and the child.

## Therapy

This covers the following stages:

1. Self – observation: with the child becoming aware of in appropriate behavior
2. In appropriate thoughts & behavior level of awareness reached by the child in the earlier stage, becomes a new indication that helps create self – talk
3. Development of change – related cognitive aspects: a change is cited regarding self – talk with in the child different from that happening before launching the proposed therapy.

**Methods of professional intervention:**

1. Self-instructional training.
2. Re-attribution training.
3. Stress inoculation training.
4. Self-control.
5. Modeling.
6. Relaxation.
7. Homework.

## Funding

None.

## Acknowledgments

None.

## Conflicts of interest

The authors declare that there is no conflict of interest to declare.

## References

1. Adel Hussein lofty. Child & surgery. Cairo Medical education development center: Cairo university; 1999.
2. Mohammed Abdul Moneim Nour. Medical Social Work and Rehabilitation. Cairo: Knowledge House; 1985.
3. Ryiad Ahmed Al. Surgery and psychological therapy. Beriut; 1988.
4. Shirley Oris. Health Care Social Work. Encyclopedia of social work. 20th edn. USA: N.A.S.W press; 2008. pp. 348– 53.
5. Rafat Abdul Rahman Moh. Clinical Social Work. Alex: Modern Academic office; 2013.