Title: Establishment of Interdisciplinary Child Protection Teams in Turkey 2002-2006: Identifying the strongest link can make a difference!

Article Type: Full Length Article

Keywords: Child abuse and neglect, multidisciplinary team, developing country

Corresponding Author: Assc. prof. resmiye oral, MD

Corresponding Author's Institution: university of iowa

First Author: taner akar

Order of Authors: taner akar; canan a agirtan; cahide aydin; gulsen aytar; tugba belgemen; Ufuk Beyazova , Professor of Pediatrics; ozdecan bezirci; Fatma Y Beyaztas, Asisstant Professor of Forensic Medicine; Bora Buken, Assistant Professor of Forensic Medicine; Erhan Buken, Assistant Professor of Forensic Medicine; Demet Can, Associate Professor of Pediatrics; Gurol Cantürk'; Abdulhakim Coskun; Ahmet Celik, Assistant Professor of Surgery; Fusun C Cetin, Professor of Child Psychiatry; Ayse G Coskun; Yildiz Dallar; Birol Demirel; Billur Demirogullari; Orhan Derman; Yusuf Ersahin, Professor of Neurosurgery; Dilek Dilli; Burcu Eşiyok; Gulin Evinc; Ozlem Gencer; Bahar Gökler, Professor of Child Psychiatry; Sevgi B Gulnar, Professor of Pediatrics; Hamit Hanci, Professor of Forensic Medicine; Elvan Iseri, Assistant Professor of Child Psychiatry; Aysun B Isir; Nukhet Isiten; Gulsev Kale, Professor of Pediatrics; Ferda Karadag; Nuray Kanbur, Assistant Professor of Pediatrics; Birim G Kiliç, Assistant Professor of Child Psychiatry; Ebru Kultur, Assistant Professor of Pediatrics; Derya Kurtay; Asli Kuruoglu; Suha Miral, Professor of Child Psychiatry; resmiye oral, associate professor of pediatrics; Filiz S Orhon; Aysun B Odabasi, Assistant Professor of Forensic Medicine; Cengiz Özbesler; Dilsat F Ozdemir; Mehmet S Ozkok; Elif Ozmert; Figen Pasli; Onur Polat; Figen Sahin, Associate Professor of Pediatrics; Serpil Salacin, Professor Of Forensic Medicine; Emine Suskan; Deniz
Abstract: Objectives: The University of Iowa Child Protection Program collaborated with Turkish professionals to develop a series of training activities on child abuse & neglect during 2002 to 2006 with the goals of increasing professional awareness and number of multidisciplinary teams (MDT), regional collaborations, and assessed cases. This paper summarizes the five-year outcome.

Methods: A team of instructors evaluated needs and held training activities in Turkey annually, and provided consultation when needed. Descriptive analysis was done via Excel and SPSS software.

Results: Eighteen training activities were held with 3,570 attendees. Over the study period, the number of MDTs increased from four to fourteen. The MDTs increasingly got involved in organizing training activities in their institutions and in the community. The number of medical curriculum lectures taught by MDTs to medical students and residents, the number of conferences organized by the MDTs, and the number of lectures to non-medical professional audiences increased significantly (R2=91.4%, 83.8%, and 69.2%, respectively). The number of abuse cases assessed by the MDTs also increased by five times compared to pre-training period.

Conclusions: A culturally competent training program had a positive impact on professional attitudes and behaviors toward the recognition and management of child abuse & neglect in Turkey. The need to partner with policy makers to revise current law in favor of a greater human services orientation became clear.
Dear Dr. Wolfe and Dr. Oates,

On behalf of an international multi-center collaboration I would like to resubmit the manuscript titled “Establishment of Interdisciplinary Child Protection Teams in Turkey 2002-2006: Identifying the strongest link can make a difference!” to Child Abuse and Neglect after second round of recommended revisions.

The revisions that I made are as follows according to your recommendations:

In response to reviewer II’s comments:

1) After recounting the total numbers of attendees I had changed it from 3550 to 3570. Currently, it is 3,570 in both abstract and the text, which is the correct number.

2) I clarified the “three cities” on Page five.

3) There has been no local/regional consensus in Turkey on the definitions of various categories of child abuse and neglect, nor have there been any clear descriptions in the law except for a recent sexual abuse description. This phrase was added to the methods section.

4) I explained that each MDT modified the guideline that I developed, and created an institution specific clinical guideline according to their resources and needs.

5) I added education as a field from which representatives attended the training sessions (that was my oversight). Law enforcement refers to police and I entered that in parenthesis first time it was mentioned to avoid misunderstanding of readers who may not know this term.

6) I added the phrase “The other four are still in the process of expanding the structure of their teams” to page 7.

7) I entered references for the claim of professional overworking and poor training (there is no institutional or state organized professional training established in Turkey nor is there any mandate for professional training) and changed the “poorly trained” phrase to a less descriptive phrase.
8) Vs was replaced with versus.

9) The “protection of the victim” comment at the end of page 11 is in the context of discussing a study from the literature. A follow up study for the long term outcome of the victims captured in the process of this project is beyond the scope of this report. Thus I didn’t think it was necessary to mention that in discussion.

10) I added the fact that trainees from Ankara and Kayseri shared knowledge and experience to what they did (already explained) after they returned to Turkey.

11) Other and various professional fields were listed.

In response to reviewer III’s comments:

1) I shortened the discussion further. I removed 3-4 paragraphs and their related references that were not directly related to the hypotheses of this paper. This way, despite additions based on the second reviewer’s comments, the text was shortened to 13 pages total.

In response to reviewer IV’s comments:

I did not receive any files attached to the e-mail message related to this reviewer’s comments.

Sincerely,

Resmiye Oral, MD
Clinical Associate Professor of Pediatrics
Director, Child Protection Program
The Children's Hospital of Iowa
*1a. Response to Reviewers*

David A. Wolfe, MD  
Editor-in-chief  
Kim Oates, MD  
Senior Associate Editor  
Child Abuse and Neglect  

Dear Dr. Wolfe and Dr. Oates,

I received your last message requesting second revision of the manuscript titled “Establishment of Interdisciplinary Child Protection Teams in Turkey 2002-2006: Identifying the strongest link can make a difference!” On behalf of the international team of authors, I made the necessary changes and provided explanations for those I felt are not necessary below:

In response to reviewer II’s comments:

1) After recounting the total numbers of attendees I had changed it from 3550 to 3570. Currently, it is 3,570 in both abstract and the text, which is the correct number.  
2) I clarified the “three cities” on Page five.  
3) There has been no local/regional consensus in Turkey on the definitions of various categories of child abuse and neglect, nor have there been any clear descriptions in the law except for a recent sexual abuse description. This phrase was added to the methods section.  
4) I explained that each MDT modified the guideline that I developed and created an institution specific clinical guideline according to their resources and needs.  
5) I added education as a field from which representatives attended the training sessions (that was my oversight). Law enforcement refers to police and I entered that in parenthesis first time it was mentioned to avoid misunderstanding of readers who may not know this term.  
6) I added the phrase “The other four are still in the process of expanding the structure of their teams” to page 7.  
7) I entered references for the claim of professional overworking and poor training (there is no institutional or state organized professional training established in Turkey nor is there any mandate for professional training) and changed the “poorly trained” phrase to a less descriptive phrase.  
8) Vs was replaced with versus.  
9) The “protection of the victim” comment at the end of page 11 is in the context of discussing a study from the literature. A follow up study for the long term outcome of the victims captured in the process of this project is beyond the scope of this report. Thus I didn’t think it was necessary to mention that in discussion.  
10) I added the fact that trainees from Ankara and Kayseri shared knowledge and experience to what they did (already explained) after they returned to Turkey.  
11) Other and various professional fields were listed.
In response to reviewer III’s comments:

1) I shortened the discussion further. I removed 3-4 paragraphs and their related references that were not directly related to the hypotheses of this paper.

In response to reviewer IV’s comments:

I did not receive a file attached to your e-mail message with this reviewer’s comments.
Establishment of Interdisciplinary Child Protection Teams in Turkey 2002-2006: Identifying the strongest link can make a difference!

Multi-center Collaboration on Improving the Clinical Management of Child Abuse and Neglect (Contributing authors/practitioners are in alphabetical order by last name)

Taner Akar 1, Reccep Akdur 2, Canan A. Agirtan 3, Cahide Aydin 4, Gulsen Aytar 3, Tugba Belgemen 2, Ozdecan Bezirci 2, Ufuk Beyazova 1, Fatma Y. Beyaztas 5, Bora Buken 3, Erhan Buken 6, Demet Can 7, Gurol Cantürk 2, Abdulkhakim Coskun 8, Ahmet Celik 4, Fusun C. Cetin 9, Ayse Gul Coskun 10, Yildiz Dallar 11, Birol Demirel 1, Billur Demiroglu 1, Orhan Derman 9, Dilek Dilli 11, Yusuf Ersahin 4, Burcu Esyok 2, Gulin Evinc 9, Ozlem Gencer 12, Bahar Gökler 9, Sevgi B. Gulnar 2, Hamit Hanci 2, Elvan Iseri 1, Ayse Gul 11, Nukhet Isiten 13, Gulsev Kale 9, Ferda Karadag 9, Nuray Kambur 9, Birim Kiliç 2, Ebru Kultur 9, Derya Kurtay 14, Asli Kuroglu 1, Suha Miral 12, Aysun B. Odabasi 9, Resmiye Oral 15, Filiz S. Orhon 2, Cengiz Özbesler 6, Dilsat F. Özdemir 9, M. Selim Ozkok 14, Elif Ozmert 9, Didem B. Oztap 8, Figen Pasli 1, Onur Polat 2, Figen Sahin 1, Serpil Salacin 12, Emine Suskan 2, Deniz Tekin 2, Ozlem Teksam 9, Ulku Tiras 11, Ali R. Tumer 9, Betul Uluko 2, Runa Uslu 2, Fatma V. Tas 12, Nilgun Vatandas 5, Sevtap Velipasaoglu 16, Fatih Yagmur 8, Aydin Yagturlu 2, Songul Yalcin 9, Sukryye Yavuz 7, Kadriye Yurdakok 9

Contributing Multidisciplinary Teams (MDT):

1 Gazi University Medical School, Ankara, Turkey
2 Ankara University Medical School, Ankara, Turkey
3 Duzce University Medical School, Duzce, Turkey
4 Ege University Medical School, Izmir, Turkey
5 Sivas Cumhuriyet University Medical School, Sivas, Turkey
6 Baskent University Medical School, Ankara, Turkey
7 Behcet Uz Children’s Hospital, Izmir, Turkey
8 Erciyes University Medical School, Kayseri, Turkey
9 Hacettepe University Medical School, Ankara, Turkey
10 Gaziantep University Medical School, Gaziantep, Turkey
11 Ankara Hospital, Ankara, Turkey
12 Dokuz Eylul University Medical School, Izmir, Turkey
13 Sami Ulus Children’s Hospital, Ankara, Turkey
14 Aydin Child Advocacy Center, Aydin, Turkey
15 University of Iowa, Carver College of Medicine, Iowa City, Iowa, USA
16 Akdeniz University Medical School, Antalya, Turkey

Corresponding author: Resmiye Oral, MD
200 Hawkins Drive, 2506 JCP
Iowa City, IA 52242
Tel: 319-356-7880 Fax: 319-384-6295
E-mail address: resmiye-oral@uiowa.edu

Key Words: Child abuse and neglect, multidisciplinary team, developing country
Acknowledgements: This work was made possible by grants from the University of Iowa Provost’s Office - International Travel Program, International Society for the Prevention of Child Abuse and Neglect, American Embassy in Ankara - Turkey, British Council in Ankara - Turkey, and Turkish Institute of Science and Technology. This paper was presented as an abstract at the International Conference on Child Abuse & Neglect 9/3/2006-9/6/2006 in York, England on 9.6.2006. We would like to thank Dr. Nedret Billor for her assistance in statistical analyses of the data.
Abstract

Objectives: The University of Iowa Child Protection Program collaborated with Turkish professionals to develop a series of training activities on child abuse & neglect during 2002 to 2006 with the goals of increasing professional awareness and number of multidisciplinary teams (MDT), regional collaborations, and assessed cases. This paper summarizes the five-year outcome.

Methods: A team of instructors evaluated needs and held training activities in Turkey annually, and provided consultation when needed. Descriptive analysis was done via Excel and SPSS software.

Results: Eighteen training activities were held with 3,570 attendees. Over the study period, the number of MDTs increased from four to fourteen. The MDTs increasingly got involved in organizing training activities in their institutions and in the community. The number of medical curriculum lectures taught by MDTs to medical students and residents, the number of conferences organized by the MDTs, and the number of lectures to non-medical professional audiences increased significantly ($R^2=91.4\%, 83.8\%, \text{ and } 69.2\%$, respectively). The number of abuse cases assessed by the MDTs also increased by five times compared to pre-training period.

Conclusions: A culturally competent training program had a positive impact on professional attitudes and behaviors toward the recognition and management of child abuse & neglect in Turkey. The need to partner with policy makers to revise current law in favor of a greater human services orientation became clear.
Introduction

Child abuse & neglect is a fairly new clinical field in Turkish society, although the Turkish Society for the Prevention of Child Abuse & Neglect (TSPCAN) was founded in 1988 (Kesim & Polat, 1993). This organization raised professional awareness in Turkey through training activities. Media also helped increase public awareness to a certain extent over the last decade. With the ratification of the International Convention on Children’s Rights by the Turkish government in 1995 policy makers did start working on amending “Child in Need of Assistance” law (Ankara Tabip Odasi, 2005).

Child abuse & neglect in the Turkish Code (Social Services Child Protection Law, 2005)

Despite a distinctive “Child in Need of Assistance” law adopted by Turkish governments decades ago, child protection measures are still far from being comprehensive enough. Many issues related to child abuse & neglect are scattered within the statutes on “violation of well being of a human being”. “Child in Need of Assistance” law does not cover clear description of various categories of child abuse & neglect, mandatory reporting to child protective services, time line for the filing of a report, public and professional education for the prevention of abuse, continuing education for professionals in regards to management of abused children, national database and surveillance system both for the victims and the offenders, and the need for multidisciplinary management. Reporting of abuse is addressed in the Criminal Code since the law approaches child abuse & neglect from a criminal perspective. Mandatory reporters are identified as all citizens and state officials in the criminal law. The recent amendment clarifies only the definition of sexual assault/abuse.

Child Protection Services resources are very limited. There are only two schools of social work graduating less than 200 social workers per year, a minority of which finds positions at the state level to practice their profession in human services due to current state policies. Eighty-one regional Departments of Social Services under the Turkish Republic of Prime Ministry, Social Services and Child Protection Institution are designated to handle child protection issues in addition to all other social support. Under this network 3,260 social workers are employed to serve a population of over 70 million (Social Services Agencies, 2006).
The law allows the judge to order the Department of Social Services to provide services to the family if the prosecutor takes the case to court, which occurs rarely leading to missed opportunity for social services. Forensic medicine physicians appointed as expert witnesses for criminal courts may get involved in the assessment of a case long after injuries have healed and the evidence of the crime has been lost.

**Societal Awareness of child abuse & neglect**

Culturally, physical discipline of children is approved of and several field studies revealed that up to one third of children in Turkey may be physically abused (Bilir, Ari, & Donmez, 1986, Oral, Can, et al., 1998, Oral, Yavuz, Can, Kütługun, & Genç, 1997, Zeytinoglu & Kozcu, 1991). Intra-familial sexual abuse remains highly under-reported to authorities due to social taboos. Few published studies report a sexual abuse prevalence of 11% to 37% of the adolescent population (Alikasifoglu, et al., 2006, Aras, Aksel, & Alyanak, 1996, Atamer, Asli, & Lawrence, 1998). Emotional abuse and neglect can only be assumed to be quite common, considering high rates of domestic violence, poverty, and low educational levels. Overall public, professional, and governmental awareness of child abuse & neglect remains low in Turkey.

**Research and Clinical Practice on Child abuse & neglect**

1995). This study led to Izmir Child Abuse Follow-up Team and the first MDT in Turkey at Behcet Uz Children’s Hospital in 1996, which started the clinical practice of child protection at hospital settings in Turkey. Following this team, three more teams were established at Cukurova Medical School Hospital, Dokuz Eylul Medical School Hospital, and Gazi Medical School Hospital before 2002 (four teams in 6 years). Behcet Uz Children’s Hospital MDT was the only MDT that published cases series (Beyaztas, Dokgoz, Oral & Demirel, 2006, Oral, et al., 1996, Oral, Can, et al., 1998, Oral, Yavuz, et al., 1998).

Collaboration between the University of Iowa Child Protection Program and University Medical Schools and Children’s Hospitals in Turkey

The University of Iowa Child Protection Program established a collaboration with the Departments of Pediatrics and Forensic Medicine at the University Medical School Hospitals and Children’s Hospitals in Turkey to develop culturally competent and interdisciplinary training activities for the improvement of the recognition, management, and treatment of child abuse & neglect. The first hypothesis was: The medical community with a focus on pediatricians, forensic medicine physicians, and child psychiatrists is the strongest link in Turkey to generate a leap in the clinical management of child abuse & neglect by collaborating with other child protection disciplines. University hospitals and state pediatric teaching hospitals have relatively substantial manpower and financial resources. Medical staff from these hospitals is involved with clinical practice, teaching, and research by their job description. Thus, it was anticipated that the medical professionals would represent the most likely discipline to improve clinical services, contribute to the pool of trainers and lead efforts to assess outcomes of this project. The second hypothesis was: The number of cases diagnosed and followed up by each hospital will increase by the establishment of multidisciplinary teams (MDT) during the study period. The goals for the first five year period of this study included increasing professional awareness and the number of established MDTs and patients diagnosed and followed up by each MDT and enhancing regional interdisciplinary collaborations. This paper summarizes the 5 year outcome of this collaboration between 2002 and 2006.

Methods

The steps to reach these goals: A team of instructors led by a culturally competent expert was established,
which offered need-based training activities in three cities (with a focus on Ankara and two additional cities each year) in Turkey over two weeks on an annual basis. A core group of collaborators evaluated strengths, weaknesses, needs, and barriers to interdisciplinary response to child abuse & neglect every year to re-shape the training activities. Training activities targeted at a) increasing general professional awareness b) providing in-service training to selected MDTs to establish and improve community based collaborations, c) improving regional and national clinical practice with regional interdisciplinary collaborations. The team of instructors focused on training the trainers and Ankara MDTs because of Ankara (nation’s capital) hospitals’ capacity to influence the policy making. Finally, University of Iowa Child Protection Program was available for consultation services when needed.

The outcome measures included: 1) Number of attendees to training activities, 2) Number of established MDTs, 3) Number of established regional collaborations. 4) MDT members’ involvement as trainers in training activities as indicated by the number of hours of medical curriculum taught to medical trainees, conference days attended by MDT members, and the number of lectures given to multidisciplinary professional audiences, and 5) Numbers of cases assessed by MDTs. Change in professional knowledge level was not assessed due to funding limitations.

There has been no local/regional consensus in Turkey on the definitions of various categories of child abuse & neglect, nor have there been any clear descriptions in the law except for a recent sexual abuse description. Because of that abuse categories were defined as follows based on the literature: Physical abuse: Any mark lasting for more than 48 hours, the history of which was not consistent with the type, extent, or mechanism of the injury or with the child’s developmental level (Leventhal, 1996) or by the child’s or a neutral witness’ disclosure. Sexual abuse/assault: Any sexual act directed towards a minor for the sexual gratification of the offender by someone known to the child (Leventhal, 1996) or by a stranger. Psychological abuse: Any act by caretakers involving humiliation, ignorance, rejection, unacceptable punishments or expectations that causes psychological harm in a child (Cappelleri, Eckenrode, & Powers, 1993, Johnson, 1996). Neglect: Deliberate failure to provide a child with his/her nutritional, medical, educational, emotional, and safety needs to the extent of harming the child’s well-being (Kairys & Johnson, 2002, Zuravin, 1999).
Each MDT in this project modified a baseline clinical guideline developed by one of the authors (RO) and developed an institution specific clinical practice guideline according to their institutional resources and needs that helped them manage cases more successfully. Intra-familial or extra-familial cases of abuse and neglect were assessed by the teams using the same protocol. Follow up was performed and documented by any combination of medical staff, mental health providers, child protective services, law enforcement (police).

Collaborators created a database for their case loads. Individual MDTs obtained IRB approval to use patient data for research purposes. Each MDT shared the data related to outcome and case load with one of the authors (RO), who analyzed the data cumulatively on an annual basis. Descriptive analyses and regression analysis of these data were done using Excel and SPSS software.

Training activities

Each year, two “train the trainers” (TTT) courses were held targeted at improving the structure of two MDTs (one in Ankara and one in another city). Attendance to these courses was limited to those who were already team members or who were contemplating to establish an MDT. On average approximately 100 professionals from medicine, psychology, nursing, public health, social work, law enforcement, and prosecution attended these TTT course each year. In addition, one or two symposia were organized open to all professional fields to improve professional awareness. Annual attendance to the symposia ranged between 400-900. Attendees for the symposia included professionals from medicine, psychology, nursing, public health, social work, law enforcement, prosecution, education, attorneys, courts, and non-governmental organizations.

Since there are no national or hospital databases on child abuse & neglect and in the absence of an MDT it is a rarity to report a case of child abuse to authorities, the diagnosis and reporting of child abuse prior to 2000 was considered to be negligible.

Results

Training activities

Ten TTT courses and eight symposia were held over five years. A total of 3,570 professionals attended all training activities (460, the TTT courses and 3110, the symposia targeted at increasing professional
awareness). In the years prior to this project, the only similar training activities would be those organized by the TSPCAN every few years training 200-300 professionals at a time.

**Outcome of Training activities**

Following the initiation of this project, ten more teams were established in five years raising the number of functioning teams to 14. The new teams were established at Ege Medical School Hospital in 2002, at Ankara Medical School Hospital, Sami Ulus Children’s Hospital, Baskent Medical School Hospital, and Ankara Hospital in 2003, at Aydin Child Advocacy Center in 2004, at Hacettepe Medical School Hospital in 2005, at Erciyes Medical School Hospital, Ondokuz Mayis Medical School Hospital, and Cerrahpasas Medical School Hospital in 2006. Ten of the current 14 teams function on a multidisciplinary basis at the institutional level and interdisciplinary basis at the community level. The other four are still in the process of expanding the structure of their teams. In 2004, the first Child Advocacy Center and in 2006, the first Child Protection Center in Turkey were established in Aydin and at Gazi Medical School Hospital in Ankara, respectively. The MDT leaders are pediatricians in five MDTs, forensic medicine physicians and child psychiatrists in four MDTs each, and the Department of Social Services in one. In 2005, significant steps toward regional collaboration among Ankara MDTs were taken and since then each team has established an interdisciplinary community team working with the Regional Department of Social Services. In addition to six MDTs in Ankara, two MDTs in Izmir and one MDT in Aydin and Kayseri also established similar regional community collaborations.

Gazi, Erciyes, Duzce, Ankara, and Osmangazi Medical School Hospital MDTs and Ankara Hospital MDT utilized the consultation services provided by the University of Iowa Child Protection Program on an as-needed basis. In 2003 and 2005, a member from two MDTs (FS and FY, authors) obtained 1 and 6-month mini-fellowship training, respectively, at the University of Iowa Child Protection Program. The Gazi Medical School Hospital MDT director (FS) was elected to the presidency of TSPCAN.

Based on above developments, academic/educational activities were increased (Table 1). The coefficient of determination values based on regression analysis also suggested that a tendency toward an increase in the number of hours of medical curriculum taught to medical students and residents ($R^2=91.4\%$), the number of
lectures given to multidisciplinary professional audiences ($R^2=83.8\%$), the number of conferences with a child abuse & neglect focus organized by the MDT members ($R^2=69.2\%$), and the number of conference days attended by MDT members ($R^2=36.4\%$). All MDTs became trainers of professionals related to child protection and lay audiences for the primary and secondary prevention of child abuse & neglect at the local/regional/national level.

**Characteristics of case series**

Of the 14 teams represented in this study, ten (71.4\%) have established databases to track cases. These teams cumulatively assessed 593 children from 2000 to 2006. However, only two of the teams have data from 2000, four teams from 2001 and 2002. Six of the ten MDTs established databases after 2002 following training activities. Although this database includes client data for seven years, 16.4\% of victims (97 cases) were documented prior to 2002 when first set of training activities took place compared to 83.6\% of victims being reported from the five years following the onset of training activities (more than five fold increase). As depicted on Table 2, increasing number of cases was observed as the number of teams increased. The lack of this observation in 2003 and 2006 was due to key staff from two MDTs being on sabbatical and lack of optimal data entry during those years (none of the MDTs had a designated data entry staff).

Sexual abuse was confirmed in 39.9\% (305/765), physical abuse in 22.2\% (170/765), emotional abuse in 19.9\% (152/765), neglect in 17.4\% (133/765), and Munchausen Syndrome by Proxy in 0.6\% (5/765) of all confirmed abuse types. Looking from case-based prevalence perspective, sexual abuse was confirmed in 51.4\% of victims (305/593), physical abuse in 28.7\% (170/593), emotional abuse in 25.6\% (152/593), neglect in 22.4\% (133/593), and Munchausen Syndrome by Proxy in 0.8\% (5/593) reflecting the significant incidence of multiple types of abuse in individual cases, which was documented in 120 (20.2\%) victims (Table 3).

Actions taken following diagnosis of abuse or neglect are shown on Table 4. In 400 (67.5\%) victims a report was filed with Child Protective Services and/or with law enforcement. In 188 (31.7\%) victims a report was filed with both agencies. Two hundred and sixty eight (45.2\%) victims were also reported to Department of Public Health. One hundred and eighty six (31.4\%) victims were not reported to any agency. In these cases MDT members elected to clinically follow-up these victims at the hospital. Duration of follow-up of victims
was 3.6±6.6 months with a range of 1 to 27 months. The relatively short duration of follow up was due to factors such as: Cases with confirmed sexual assault perpetrated by strangers were not followed up by the MDTs or child protection services. Due to lack of a national database many cases were lost to follow up by both MDTs and child protection services because of relocation of the family.

Discussion

A five year plan of training activities on child abuse & neglect to multi-disciplinary and interdisciplinary audiences with a special focus on hospital-based MDTs proved successful in improving clinical, hospital-based recognition and reporting of child abuse & neglect in Turkey, considering the fact that medical staff rarely recognized and reported any suspicious abuse to authorities before 2000. As a result of these activities, 3,570 professionals obtained training on child abuse & neglect over 5 years. The number of MDTs increased from 4 to 14. Interagency community collaboration improved significantly in four cities involving ten of the fourteen teams. Seven MDT members obtained formal training on child abuse & neglect two of whom completed a 1 and 6 month mini-fellowship at the University of Iowa. Establishment of new MDTs increased referral and assessment of suspected cases of child abuse & neglect by five times leading to the first multi-center case series in Turkey at national scale.

Professional training is important to prevent and appropriately manage child abuse & neglect. Even in developed countries with well designed child protection systems, this aspect of the field is constantly tested and re-evaluated (Bryan, DeBord, & Schrader, 2006, Carter, Bannon, Limbert, Docherty, & Barlow, 2006). In developing countries on the other hand, such activities are held only by a handful of pioneers who recognize the importance of professional development to improve the field (Al-Moosa, Al-Shaiji, Al-Fadhli, Al-Bayed, & Adib, 2003, Hadi, 2000, Haj-Yahia, 1995, Mavroforou & Michalodimitrakis, 2002, Shor, 1998, Zeytinoğlu & Kozcu, 1991). Although, this project did not directly focus on evaluating the impact of training activities on professional attitudes and knowledge, more than 300 professionals attended the TTT courses several years in a row and these professionals created the trainers for the country. This core body of professionals definitely changed their attitudes and knowledge as reflected in the increased number of MDTs and case finding.

The Turkish child protection community came to this stage of development with the great role TSPCAN
played since 1988 by introducing the concept to various professional disciplines and increasing the professional knowledge base. During this phase, most of the training focused on the prevalence of abuse and neglect, coping strategies, and cultural characteristics similar to the experiences of other developing countries (Atamer et al., 1998, Bilir et al., 1986, Khamis, 2000, Thabet, Tischler & Vostanis, 2004, Tirosh, Offer, Cohen, & Jaffe, 2003).

The next step in almost every society has been to start developing management strategies. Reports on a community based, culturally competent management of child abuse & neglect appear in the literature only after societies start working on the clinical aspect of it (Cheung, 1997, Ertem, Bingoler, Ertem, Uysal, & Gozdasoglu, 2002, Gencer, Ozbek, Bozabali, Cangar, & Miral, 2006, Gutterman, 1997, Lee, Li, & So, 2006, Ozkara, et al., 2004). A team from Hong Kong reported significant improvement in both case finding and management with high levels of substantiation of abuse and neglect by the use of structured protocols (Lee, Li, & So, 2006). With the new millennium, Turkish professionals started looking at a structured approach to the clinical management of child abuse & neglect recognizing that true impact on case finding and improved management came with the establishment of MDTs. Behcet Uz Children’s Hospital reported zero cases of child abuse & neglect before an MDT was established in 1996. After 1996, the introduction of clinical management guidelines helped the team diagnose 50 cases in 18 months (Oral, Yavuz, et al, 1998, Oral et al, 2001). The current study, as depicted in Table 2, also showed a dramatic increase in the number of victims assessed by the MDTs following the training activities and establishment of more MDTs.

Development of regional collaborations with community agencies is also very important in the management of child abuse & neglect. Joa et al reported that suspected cases of abuse and neglect were significantly more likely to have cases filed, overall counts charged in filed cases, more counts charged against perpetrators, when assessed at a child advocacy center involving all community agencies (Joa & Edelson, 2004). During the study period, representation of state agencies was still the weaker link since most of the work was accomplished by MDT members who worked on a voluntary basis rather than institutionally designated basis. Policy makers are looking into more coordinated management of child abuse cases, who hopefully will consider child advocacy center model for this goal. The authors of this study will work on
influencing policy makers in this regard, too.

A factor of considerable significance that holds back medical professionals from reporting cases to child protective services in Turkey is the poor management of reported cases within the child protective system due to staff being overworked with very little opportunity for professional training (Kesim 1993, Oral et al 2001, Social Services Agencies 2006). As outlined on Table 4, 31.4% of all victims confirmed to be abused and/or neglected were not reported to any agency. This physician lack of trust in the system is supported in the literature. Morris et al reported that lack of confidence in local officials is one of the factors negatively affecting physician reporting attitude even in the USA (Morris, Johnson, & Clasen 1985). A study from Israel also reported that 43% of medical staff would not report cases to child protective agencies (Offer-Shechter, Tirosh, & Cohen, 2000). Another factor is that, the physicians in Turkey are by law obliged to report cases to police forces that have no training in the psychosocial aspect of child abuse & neglect. Significant legal consequences of failing to do so make even trained teams report cases to both police and child protective services at equal rates (51% versus 48%, Table 4). Table 1 already shows that the project, which is the subject of this paper revealed promising data that this project led to an increase in curriculum hours on child abuse & neglect for medical students and residents. Personal communications provide information on increased curriculum hours on child abuse & neglect in Schools of Law, Social Work, Nursing, and Police Academy as well. In addition, the MDT members of this project became trainers for the nation at large and started not only organizing increasing numbers of conferences and symposia focusing on child abuse & neglect for both professional and lay audiences on prevention of abuse at primary, secondary and tertiary levels.

This project provided Turkish professionals with a tool to overcome professional resistance to interdisciplinary management of cases. The two trainees who obtained fellowship training in Iowa reported that observing the model of interdisciplinary management of child abuse & neglect changed their perception of practice. When they returned to Ankara and Kayseri, Turkey, they not only shared their knowledge and experiences in Iowa with their community collaborators but also expanded their hospital based, purely medical MDTs to include community agency representatives, which improved their case management. The positive outcome of these initial efforts and shared experiences with other MDTs led other MDTs to establish
interagency collaborations as well. This observation is in support of the fact that international collaborations can be beneficial for countries at various levels of economic development. Lewis et al collaborated with local child protection pioneers from 17 countries in Eastern Europe and established a Network Child Abuse Prevention and Treatment Program that improved the professional practice level and awareness significantly in the course of five years (Lewis et al, 2004). They reported that the collaboration trained 3,800 mental health professionals and 17,000 multi-disciplinary professionals through direct and indirect contact. In the current study, face-to-face direct training was provided to 3,570 professionals 10% of which were MDT members and received more advanced training each year according to their developing needs. In another example from Israel, in an ultra-orthodox community, the researchers implemented a social marketing approach by a multidisciplinary team of professionals from within the community. The approach introduced an alternative community dialogue that advocated reporting and treatment, thereby reducing the fear that victims and other members of the community felt with regard to disclosing sexual abuse. The effort led to a rise in the number of reports and of people receiving treatment (Boehm & Itzhaky, 2004).

The case-load generated by the activities of this project revealed that sexual abuse was confirmed in half of the cases. This rate is much higher than the rates reported from other countries. Rate of sexual abuse is reported to be 4-13% (Creighton, 2004, National Data Archive, 2007) of all substantiated abuse cases from the USA, with similar figures from Europe (Lampe, 2002). Physical abuse and neglect are not defined in Turkish code. Poverty and low educational level blur the line between lack of resources and neglect. Coupled with professionals’ lack of trust in child protection system, knowledge on recognition of abuse, and limited social service resources, neglect and physical abuse have not been recognized as issues that call for intervention, legally and socially both by professionals and the society. Although intra-familial sexual abuse is still a taboo in Turkey, extra-familial sexual assault especially from middle class families finds its way especially to medical settings more readily explaining the high rate of sexual abuse in this series. In doing so, families may seek evidence for legal proceedings or help for psychological impact of abuse.

Strengths and Limitations:

The medical community in Turkey has accumulated a good knowledge-base to train local and regional
trainees in many areas and is willing to work collaboratively with disciplines such as social work, law enforcement, prosecution, education, and counseling, to name a few, to improve practices and together to reach out to policy makers. This study brought together all MDTs and facilities of potential MDT sites. Despite these positive features, there are several weaknesses of this study. Politically, child protection remains a low priority with minimal funding allocated to it. Because of that, none of the MDTs has designated full time staff, limiting their capacity to provide optimal service. This may have interfered with data entry underestimating the increase in case load. The state does not mandate or support in-service training in the relevant professional fields. Turkish law still approaches all human service issues in a punitive manner, hence low rate of reporting to human services. Since training to law enforcement and social services staff is very limited, law enforcement officers approach child protection from a “crime versus no crime” perspective. Once the legal decision is of the latter, the most likely outcome is that no child protection action is taken. This vicious cycle reduces the motivation of health professionals to report cases to any agency. Due to lack of state encouragement and enforcement, poor interagency collaborations and a lack of a national database continue to slow down the pace of improvement in interdisciplinary management of child abuse & neglect cases. Because of this, many cases were lost to follow up, explaining the range of follow-up of 1-27 months.

Conclusion

International collaboration among child protection professionals utilizing culturally competent educational programs and an intervention model based on interdisciplinary collaboration engaged the strongest link in Turkey to change local professional attitudes and practices in the recognition and management of child abuse & neglect relatively rapidly. Motivating the strongest link with highest motivation and resources to lead child protection related professional fields such as social work, law enforcement, and prosecution and the public at large led to an increase in the number of MDTs and regional collaborations that increased the number of cases assessed by the teams. The MDT members increased their academic and educational work in the field of child protection and became the trainers for the country. The need to develop partnerships with policy makers to revise current “child in need of assistance” law toward a more humane one with a human services orientation emerged from this project.
References


National Data Archive on Child Abuse & Neglect web site. Retrieved October 19, 2007, from:
http://www.ndacan.cornell.edu/.


Table 1. Academic activities related to Child Abuse and Neglect (CAN).

<table>
<thead>
<tr>
<th>Year</th>
<th>Organizing conferences Regional/national *</th>
<th>CAN related medical curriculum (hour/year)</th>
<th>Attending conference ** (day/year)</th>
<th>Formal in-service training (month) ***</th>
<th>Lectures to non-medical audiences ****</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2002</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>25</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
<td>25</td>
<td>17</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>2005</td>
<td>4</td>
<td>27</td>
<td>26</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>2006</td>
<td>4</td>
<td>20</td>
<td>22</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>111</td>
<td>90</td>
<td>15</td>
<td>78</td>
</tr>
</tbody>
</table>

* Number of conferences organized by the contribution of the team members  ** Total days attended by all team members *** Total months of formal training obtained by team members **** Total lectures given by team members to professionals from community agencies related to child protection
Table 2. Victim demographics and duration of abuse.

<table>
<thead>
<tr>
<th>Year (number of abused children)</th>
<th>Number of teams reporting</th>
<th>Victim</th>
<th>Perpetrator</th>
<th>Duration of abuse (years)</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 (21)</td>
<td>2</td>
<td>21</td>
<td>21</td>
<td>1.6±3.4</td>
<td></td>
</tr>
<tr>
<td>2001 (76)</td>
<td>4</td>
<td>76</td>
<td>76</td>
<td>2.3±4.4</td>
<td></td>
</tr>
<tr>
<td>2002 (101)</td>
<td>4</td>
<td>101</td>
<td>99</td>
<td>1.3±1.9</td>
<td></td>
</tr>
<tr>
<td>2003 (74)</td>
<td>6</td>
<td>74</td>
<td>74</td>
<td>0.6±1.4</td>
<td></td>
</tr>
<tr>
<td>2004 (111)</td>
<td>7</td>
<td>111</td>
<td>110</td>
<td>0.9±1.5</td>
<td></td>
</tr>
<tr>
<td>2005 (157)</td>
<td>8</td>
<td>157</td>
<td>156</td>
<td>1.6±2.4</td>
<td></td>
</tr>
<tr>
<td>2006 (53)</td>
<td>4</td>
<td>53</td>
<td>53</td>
<td>3.7±9.5</td>
<td></td>
</tr>
<tr>
<td>Total (593)**</td>
<td>10</td>
<td>593</td>
<td>589</td>
<td>1.8±4.5</td>
<td></td>
</tr>
</tbody>
</table>

* SD: Standard Deviation, ** The perpetrator was unknown in four victims.
<table>
<thead>
<tr>
<th>Year (number of abused children)</th>
<th>Physical Abuse (%)</th>
<th>Sexual Abuse (%)</th>
<th>Neglect (%)</th>
<th>Emotional Abuse (%)</th>
<th>MSBP * (%)</th>
<th>Total (abuse types) **</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 (21) ***</td>
<td>5 (23.8)</td>
<td>17 (81.0)</td>
<td>1 (4.8)</td>
<td>4 (19.0)</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>2001 (76)</td>
<td>23 (30.3)</td>
<td>32 (42.1)</td>
<td>19 (25.0)</td>
<td>21 (27.6)</td>
<td>2 (2.6)</td>
<td>97</td>
</tr>
<tr>
<td>2002 (101)</td>
<td>32 (31.7)</td>
<td>46 (45.5)</td>
<td>33 (32.7)</td>
<td>24 (23.8)</td>
<td>0</td>
<td>135</td>
</tr>
<tr>
<td>2003 (74)</td>
<td>29 (39.2)</td>
<td>34 (45.9)</td>
<td>9 (12.2)</td>
<td>20 (27.0)</td>
<td>1 (1.4)</td>
<td>93</td>
</tr>
<tr>
<td>2004 (111)</td>
<td>33 (29.7)</td>
<td>62 (55.9)</td>
<td>15 (13.5)</td>
<td>29 (26.1)</td>
<td>0</td>
<td>139</td>
</tr>
<tr>
<td>2005 (157)</td>
<td>39 (24.8)</td>
<td>79 (50.3)</td>
<td>41 (26.1)</td>
<td>48 (30.6)</td>
<td>2 (1.3)</td>
<td>209</td>
</tr>
<tr>
<td>2006 (53)</td>
<td>9 (17.0)</td>
<td>35 (66.0)</td>
<td>15 (28.3)</td>
<td>6 (11.3)</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>Total (593)</td>
<td>170 (28.7)</td>
<td>305 (51.4)</td>
<td>133 (22.4)</td>
<td>152 (25.6)</td>
<td>5 (0.8)</td>
<td>765</td>
</tr>
</tbody>
</table>

* MSBP=Munchausen Syndrome By Proxy

** More than one form of abuse was confirmed in some cases.

*** Percentages are calculated by dividing the number of abuse types by the number of victims/year
Table 4. Child Protection actions taken after confirmation of abuse or neglect.

<table>
<thead>
<tr>
<th>Year (number of abused children)</th>
<th>Report to CPS *</th>
<th>Report to Police</th>
<th>Report to DPH **</th>
<th>NR / MF ***</th>
<th>Child Removed</th>
<th>Perpetrator Tried</th>
<th>Perpetrator Convicted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>2000 (21) ***</td>
<td>4</td>
<td>19.0</td>
<td>4</td>
<td>19.0</td>
<td>1</td>
<td>4.8</td>
<td>12</td>
</tr>
<tr>
<td>2001 (76)</td>
<td>47</td>
<td>61.8</td>
<td>48</td>
<td>63.1</td>
<td>46</td>
<td>60.5</td>
<td>12</td>
</tr>
<tr>
<td>2002 (101)</td>
<td>63</td>
<td>62.4</td>
<td>39</td>
<td>38.6</td>
<td>67</td>
<td>66.3</td>
<td>39</td>
</tr>
<tr>
<td>2003 (74)</td>
<td>38</td>
<td>51.4</td>
<td>44</td>
<td>59.5</td>
<td>37</td>
<td>50.0</td>
<td>17</td>
</tr>
<tr>
<td>2004 (111)</td>
<td>49</td>
<td>44.1</td>
<td>52</td>
<td>46.8</td>
<td>45</td>
<td>40.5</td>
<td>31</td>
</tr>
<tr>
<td>2005 (157)</td>
<td>74</td>
<td>47.1</td>
<td>78</td>
<td>49.7</td>
<td>66</td>
<td>42.0</td>
<td>59</td>
</tr>
<tr>
<td>2006 (53)</td>
<td>28</td>
<td>52.8</td>
<td>21</td>
<td>39.6</td>
<td>6</td>
<td>11.3</td>
<td>16</td>
</tr>
<tr>
<td>Total (593)</td>
<td>303</td>
<td>51.1</td>
<td>287</td>
<td>48.4</td>
<td>268</td>
<td>45.2</td>
<td>186</td>
</tr>
</tbody>
</table>

* Child Protective Services, ** Department of Public Health, *** No report, medical follow-up