

HOSTED BY



ELSEVIER

Contents lists available at ScienceDirect

## International Journal of Pediatrics and Adolescent Medicine

journal homepage: <http://www.elsevier.com/locate/ijpam>

Original research article

## Child maltreatment prevention readiness in Gulf Cooperation Council (GCC) countries

Majid Al Eissa <sup>a, b, c, \*</sup>, Hassan N. Saleheen <sup>a, b</sup>, Maha Almuneef <sup>a, c</sup>, Muna Al Saadon <sup>d</sup>, Mona Alkhwari <sup>e</sup>, Aisha Almidfa <sup>f</sup>, Fadheela Almahroos <sup>g</sup><sup>a</sup> King Abdullah International Medical Research Center / King Saud bin Abdulaziz University for Health Sciences, Saudi Arabia<sup>b</sup> National Family Safety Program, King Abdulaziz Medical City - Ministry of National Guard Health Affairs, Riyadh, Saudi Arabia<sup>c</sup> Department of Pediatrics, King Abdullah Specialized Children's Hospital, King Abdulaziz Medical City, Saudi Arabia<sup>d</sup> Sultan Qaboos University, College of Medicine, Oman<sup>e</sup> Kuwait Ministry of Health, Kuwait<sup>f</sup> Dubai Foundation for Women and Children, Dubai, United Arab Emirates<sup>g</sup> Ministry of Health, Bahrain

## ARTICLE INFO

## Article history:

Received 25 April 2019

Accepted 17 July 2019

Available online 22 July 2019

## Keywords:

Child maltreatment

Cross-sectional

WHO

RAP-CM

GCC

## ABSTRACT

**Background and Objectives:** Child maltreatment (CM) is a global public health problem that has received growing attention over the past five decades. There have been many recent advances in child maltreatment prevention (CMP). The objective of this study is to assess CMP readiness to implement large-scale evidence-based CMP programs in Gulf Cooperation Council (GCC) countries.**Methods:** This cross-sectional study (n = 244) was conducted in the GCC countries. Participants were key decision makers and senior managers in the field of CM. The Readiness Assessment for the Prevention of Child Maltreatment (RAP-CM) was used to assess 10 dimensions of CMP readiness.**Results:** The key informants gave CMP readiness scores of 47.8 out of 100. Four of the dimensions (knowledge of CMP; legislation, mandates, and policies; institutional resources and links; and informal social resources) had high readiness scores ( $\geq 5$ ), while six dimensions (attitudes towards CMP; scientific data on CMP; current program implementation and evaluation; will to address the problem; material resources; and human and technical resources) had low readiness scores ( $< 5$ ).**Conclusion:** GCC countries have moderate-to-fair readiness to implement large-scale evidence-based CMP programs. Strengthening their material, human, and technical resources, and improving the quality of scientific data, collaboration, and attitudes towards CMP are required to improve each country's readiness.© 2019 Publishing services provided by Elsevier B.V. on behalf of King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

Child maltreatment (CM) is a global public health problem that, as our knowledge of the prevalence of abuse has increased, has received greater attention over the past five decades [1]. Children exposed to emotional, physical, or sexual abuse and other adverse conditions are at much greater risk of various negative health

outcomes in adulthood, including poor self-rated health, chronic disease, functional limitations, premature mortality, and poor mental health [2]. It also increases the risk of further victimization as well as the perpetration of violence [3]. According to a report by the UN Secretary General on violence on children, most children aged 0–14 years who have experienced violence experienced it in the home, with parents, caregivers, and other family members being the primary perpetrators. Globally, it is estimated that nearly 25% and 36% of children are exposed to physical and emotional abuse, respectively, while 20% of girls and 10% of boys are exposed to sexual abuse [4]. Most countries do not have CM reporting systems, but since a considerable amount of the existing literature on CM originates in the United States and Europe, it is anticipated that CM is more prevalent in these countries [5].

In the Gulf Cooperation Council (GCC) countries, research on CM

\* Corresponding author. King Saud Bin AbdulAziz University for Health Sciences (KSAU-HS), National Family Safety Program, King Abdulaziz Medical City, Ministry of National Guard -Health Affairs, P. O. Box 22490, Mail code 3202, Riyadh, 11426, Saudi Arabia.

E-mail address: [Eissam@ngha.med.sa](mailto:Eissam@ngha.med.sa) (M. Al Eissa).

Peer review under responsibility of King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia.

is scarce; what research exists indicates that CM is common and underreported [6]. For instance, in Bahrain, Al-Mahroos (2007) reported that among 150 children showing evidence of CM, 50 had been physically abused, 87 sexually abused, and 10 both physically and sexually abused [7]. Al-Ateeqi, Shabani, & Abdulmalik (2002) examined 16 children in Kuwait known to have experienced CM between 1991 and 1998. Of these, 13 had been physically abused, two had been sexually abused, and one had experienced Munchausen's syndrome by proxy (MSP) [8]. Koul et al. (2000) found five cases (3 males and 2 female, aged 1–11 years) of MSP in the Sultanate of Oman [9]. A study conducted in the United Arab Emirates (UAE), which featured a cluster sample of 4,111 Emirati and resident children from private schools in all seven emirates, found that 6.5% of the children were abused at home, with the father being the primary perpetrator (32.7%). Furthermore, 12.3% of children were abused at school, with friends (48.3%) and teachers (29.4%) being the primary perpetrators [10]. In the Kingdom of Saudi Arabia (KSA), the prevalence rates of the individual types of victimization (according to the ISPCAN Child Abuse Screening Tool – Children's Home version) were as follows: psychological abuse, 65%; exposure to violence, 64%; neglect, 53%; physical abuse, 50%; and sexual abuse, 10% [11].

The financial costs of CM for victims and society as a whole are substantial. Furthermore, actually treating the consequences of CM appears to be less effective and more costly than striving to prevent it [12]. This has made CM prevention (CMP) a global health priority. CMP necessitates the development of safe, stable, and healthy relationships and environments for children and their parents/caregivers. Specifically, securing such relationships and environments can protect children against early adverse events, and are essential for ensuring their long-term physical and psychological well-being [13].

The field of CMP has seen many advances recently. Of particular relevance is the participation of the National Family Safety Program (NFSP), in collaboration with the WHO, in a global research project investigating six countries, including the KSA, to obtain a better understanding of various countries' readiness to implement large-scale CMP programs. According to this project, capacity building; strengthening of material resources; and improving institutional links, collaborations, and attitudes toward CM were required for a country to be sufficiently ready in this regard. The project results showed that the KSA had moderate-to-fair readiness to implement large-scale CMP programs, based on the aforementioned factors [14,15]. Despite these findings, the last 5 years has seen much improvement in overall knowledge and scientific data on CMP; legislation, mandates, and policies; and institutional links and resources. As such, a new report and re-evaluation of the situation in the KSA may be necessary.

According to GCC experts' opinions during preliminary discussions with field leaders, stakeholders, and site principal investigators, there is an overall lack of research on CM and CMP in GCC countries outside of the KSA. Accordingly, the NFSP is now collaborating with investigators from these other GCC countries to assess their level of readiness, share technical support, and implement large-scale evidence-based CMP programs at the regional level, based on their similar backgrounds and cultures. Such regional-level assessment and implementation will strengthen cooperation and coordination between policymakers, individuals, and organizations with regard to CM. Furthermore, it will provide recommendations and technical advice in service of the set objectives, and aid in the development of health strategies, policies, and systems that target health service development in GCC countries. Finally, it will promote the exchange of CM experiences with a view toward prevention, organization and harmonization of efforts, saving costs, and better allocation and utilization of

resources.

The present study is an expansion of the work conducted in the KSA. The aim was to assess readiness for the implementation of large-scale evidence-based CMP programs in the GCC countries.

## 2. Materials and methods

### 2.1. Participants

This cross-sectional study was conducted in 2016 with key informants ( $n = 244$ ) from the GCC countries. These key informants were individuals with some degree of influence and decision-making power over CMP, including policymakers, program planners, commissioners and implementers, high-level practitioners, and high-level civil servants with a strong interest in CM. They were selected from various types of organization within each country, such as health or social affairs ministries, NGOs, the regional offices of international organizations, and educational or research institutions. The key informants were selected using the selection matrix depicted in Table 1, which was created to ensure that key informants from all relevant organizations and sectors were included.

### 2.2. Training the site investigators

The NFSP, which is based in KSA, was the lead site for this study. The research team comprised site investigators and a group of researchers. The site investigators were mainly senior pediatricians and professionals from governmental agencies working in the field of child health. Each site investigator was responsible for the appropriate conduct of this study, acquiring the local ethical approval from his/her research institutions, recruiting data collectors, and ensuring the quality of the research data collected. When recruiting the data collectors, the site investigators focused on professionals working in child protection and who were familiar with the national and international organizations actively involved in combatting CM.

A workshop was conducted at the NFSP to recruit site investigators from the various GCC countries, introduce them to the study, discuss the study timeline, and train them on administering the questionnaire and gathering the data. Specifically, the workshop offered extensive details on the study objectives, methodology, interview techniques, data collection tool, accuracy of data, ethical considerations, and data transfer. Furthermore, the principal investigator (PI) visited each country during the inception phase in order to train the data collectors.

### 2.3. Procedure

After receiving the standardized training, the site investigators contacted potential participants by telephone and introduced them to the study. Participants received an explanation in terms of the nature of the study. Face-to-face interviews were conducted with all participants, usually at their workplace. Before beginning the interview, the data collectors presented endorsement letters to the participants that described the goals of the study and outlined its anonymous nature. Furthermore, they obtained written informed consent from each participant. Each interview took approximately 30 min to complete and no compensation was given for completing the interview. All completed questionnaires, along with the consent forms, were shipped to the main study site (i.e., the NFSP). The PI reviewed all completed questionnaires in order to verify the data before data entry. The scoring of the questionnaires, data entry, and statistical analysis were all conducted at the NFSP.

**Table 1**  
Recommended distribution of the participants according to their affiliations.

| Type of organization                 |  | %  |
|--------------------------------------|--|----|
| International                        | - International organizations (e.g. UNICEF, WHO, etc.)   | 5  |
| Government departments or ministries | - Health, public health etc.<br>- Social welfare, development, affairs, etc.<br>- Education<br>- Women and children<br>- Justice, criminal justice, etc. | 35 |
| Civil society                        | - NGOs<br>- Community-based organizations, etc.  | 25 |
| Research                             | - Universities<br>- Research institutes<br>- Think tanks etc.  | 15 |
| Leaders                              | - Formal leaders in CM<br>- Informal leaders in CM<br>- CM Champions and patrons etc.  | 10 |
| Politicians and law-makers           | - Parliamentarians<br>- Party leaders<br>- Lawyers and judges etc.   | 10 |

CM = child maltreatment; NGO = nongovernmental organization; UNICEF = United Nations Children's Emergency Fund; WHO = World Health Organization.

#### 2.4. Measures

The Readiness Assessment for the Prevention of Child Maltreatment (RAP-CM) was developed by the WHO in five countries (Brazil, The Former Yugoslav Republic of Macedonia, Malaysia, Saudi Arabia, and South Africa) through a five-stage process [15–21]. The RAP-CM is based on a model of readiness for CMP with 10 dimensions, each containing several items (Table 2): (1) attitudes toward CMP; (2) knowledge of CMP; (3) scientific data on CMP; (4) current program implementation and evaluation; (5) legislation, mandates, and policies; (6) will to address the problem;

**Table 2**  
The 10 dimensions and sub-dimensions of the RAP-CM.

|  |
|--|
| <b>Dimension 1: Attitudes toward CMP</b>   |
| 1.1. The priority of CMP in the country  |
| 1.2. Adequacy of CMP measures  |
| <b>Dimension 2: Knowledge of CMP</b>   |
| 2.1. Main consequences of CM for the victim  |
| 2.2. Main risk factors for CM  |
| <b>Dimension 3: Scientific data on CMP</b>   |
| 3.1. Data on the magnitude and distribution of CM in the country   |
| 3.2. Quality of these data   |
| <b>Dimension 4: Current program implementation and evaluation</b>  |
| 4.1. List of present and past CM programs in the country   |
| <b>Dimension 5: Legislation, mandates, and policies</b>  |
| 5.1. Governmental or nongovernmental agencies officially mandated with CMP in the country                    |
| 5.2. Official policies addressing CMP in the country   |
| <b>Dimension 6: Will to address the problem</b>  |
| 6.1. Presence of committed political leaders to CMP and are taking effective measures to address the problem |
| 6.2. How intensive have communication efforts been concerning CMP  |
| <b>Dimension 7: Institutional links and resources</b>  |
| 7.1. Institutions currently involved in CMP  |
| 7.2. Partnerships, alliances, coalitions, or networks of institutions dedicated to CMP                       |
| <b>Dimension 8: Material resources</b>   |
| 8.1. Dedicated budget for the ministry of social welfare for CMP   |
| 8.2. Dedicated budget for other ministries for CMP   |
| <b>Dimension 9: Human and technical resources</b>  |
| 9.1. Adequate number of professionals in CMP for large scale implementation of CMP programs                  |
| 9.2. Availability of educational institutions which devote some of the curriculum to CMP                     |
| <b>Dimension 10: Informal social resources</b>   |
| 10.1. Level of citizens' participation in addressing health and social problems in the country               |
| 10.2. Level of joint efforts of citizens   |

CMP = child maltreatment prevention; CM = child maltreatment.

(7) institutional links and resources; (8) material resources; (9) human and technical resources; and (10) informal social resources [22].

There are two parallel versions of the RAP-CM based on the same 10-dimensional model—the long version (RAP-CM-I), which offers a full assessment, and the short version (RAP-CM-SV), which offers a rapid assessment. More specifically, the RAP-CM-I produces a detailed assessment of CMP readiness based on two sources of information: the views of key informants and those of a group of experts [14]. The RAP-CM-SV, on the other hand, is administered to key informants only. In this study, we opted to use the short version (RAP-CM-SV), which has been shown to be highly correlated with the RAP-CM-I (with a correlation of 0.9 for the total scores and correlations ranging from 0.7 to 0.9 for the dimension scores). Their strong correlation indicates that we can easily compare our findings using the short version with previous findings using the long version [22]. We added an additional open-ended question to the end of the tool to obtain informants' recommendations for improving the national readiness programs. This question was translated into Arabic (which all professionals in GCC countries speak) and then back-translated into English. As for the psychometric properties of the instrument, the factor structure and internal consistency reliability of the RAP-CM-I were explored and found to be acceptable.

#### 2.5. Ethics

Candidates determined to be eligible to participate were fully informed about the study, their right to refuse or withdraw, and all procedures put in place to ensure the privacy of the interviews. They were asked (individually and separately) to review an informed consent statement before agreeing to participate in the study. Prior to providing their consent, they were again told the nature of the study and given more information on the types of question that they would be asked. Subsequently, the participants either signed or initialed the informed consent form.

In this study, all data comprised participants' answers to a quantitative survey. Data were collected only for the purposes of this study, and were not used for other purposes. A number of steps were taken to protect participants' confidentiality: (1) All project staff received ongoing supervision in areas related to ethical conduct, confidentiality protection, and other issues in human subject protection; (2) the survey forms did not contain participants' names, and instead were labeled with reconstructable

personal alphanumeric identifiers; (3) all data were stored in a locked cabinet or designated computer with an access-limited locked hard drive at the NFSP; and (4) a hard copy of the information was stored in a locked cabinet that did not contain any other data.

Governmental bodies and nongovernment organizations (NGOs) dealing with CMP are expected to directly benefit from this study; by contrast, there were no direct benefits to participants. The study is expected to indirectly benefit health educators, social workers, research groups, and individual researchers. Participants did not experience any psychological distress or harm as a result of answering the interview questions.

### 2.6. Data analysis

All data were processed for analysis using SPSS Statistics 20 [23]. We calculated the score (based on the RAP-CM-SV scoring system) for each question and dimension, and the total score of the 10 dimensions (reported on a scale of 100). Each dimension was then categorized based on the mean score (rated on a scale of 1–10): a mean score of five or higher represented high readiness, and a mean of under five indicated low readiness [14]. We also compared dimension scores by country via a one-way analysis of variance (ANOVA), with Tukey's honestly significant difference test (HSD) as the post hoc test. The association between different countries and demographic characteristics (sex and organization type) was evaluated using a chi-square test. In addition,  $p$  values of  $<.05$  were considered significant.

## 3. Results

### 3.1. Demographics of the participants

Table 3 shows the demographic characteristics, organization types, and domains of the key informants. We observed statistically significant differences in several of the sample characteristics measured. For instance, in most of the countries, most key informants were female ( $p < .01$ ) and government employees

**Table 3**  
Demographics of the participants (n = 244).

| Country | Gender N (%) <sup>*</sup> |           | Organization type N (%) <sup>*</sup> |                  |                  |                            |                     |          |
|---------|---------------------------|-----------|--------------------------------------|------------------|------------------|----------------------------|---------------------|----------|
|         | Male                      | Female    | Governmental                         | Non-governmental | Private (profit) | International organization | University/research | Other    |
| Bahrain | 14 (31.1)                 | 31 (68.9) | 27 (60.0)                            | 6 (13.3)         | 2 (4.4)          | 6 (13.3)                   | 3 (6.6)             | 1 (2.2)  |
| Kuwait  | 22 (48.9)                 | 23 (51.1) | 23 (51.1)                            | 7 (15.5)         | 10 (22.2)        | –                          | 3 (6.6)             | 2 (4.4)  |
| Oman    | 13 (26.5)                 | 36 (73.4) | 27 (55.1)                            | 8 (16.3)         | 1 (2.0)          | 2 (4.0)                    | 3 (6.1)             | 8 (16.3) |
| KSA     | 26 (43.3)                 | 34 (56.6) | 34 (56.6)                            | 11 (18.3)        | 2 (3.3)          | 2 (3.3)                    | 10 (16.6)           | 1 (1.6)  |
| UAE     | 13 (28.8)                 | 32 (71.1) | 27 (60.0)                            | 10 (22.2)        | –                | 2 (4.4)                    | 5 (11.1)            | 1 (2.2)  |

KSA = Kingdom of Saudi Arabia; UAE = United Arab Emirates.

<sup>\*</sup> $p < .05$ .

**Table 4**  
Raw and mean scores on ten dimensions of the RAP-CM for Gulf Cooperation Council (GCC) countries.

|   | Raw score | Mean score on scale of 1–10 |
|---|-----------|-----------------------------|
| Dimension 1: Attitudes towards child maltreatment prevention  | 1.31/4    | 3.28                        |
| Dimension 2: Knowledge of child maltreatment prevention       | 2.74/4    | 6.86                        |
| Dimension 3: Scientific data on child maltreatment prevention | 1.43/4    | 3.58                        |
| Dimension 4: Current program implementation and evaluation    | 1.79/4    | 4.48                        |
| Dimension 5: Legislation, mandates, and policies              | 3.26/4    | 8.16                        |
| Dimension 6: Will to address the problem                      | 1.83/4    | 4.58                        |
| Dimension 7: Institutional resources and links                | 2.37/4    | 5.94                        |
| Dimension 8: Material resources                               | 1.65/4    | 4.13                        |
| Dimension 9: Human and technical resources                    | 0.75/4    | 1.88                        |
| Dimension 10: Informal social resources (non-institutional)   | 2.00/4    | 5.00                        |
| Total score   | 19.13/40  | 47.83                       |

( $p < .01$ ).

### 3.2. Scores of different dimensions

The key informants gave a total mean readiness score of 47.8% (out of 100%) for the GCC countries to implement large-scale, evidence-based CMP programs (Table 4). Four of the dimensions (knowledge of CMP; legislation, mandates, and policies; institutional resources and links; and informal social resources) had high readiness scores ( $\geq 5$ ), and six dimensions (attitudes towards CMP; scientific data on CMP; current program implementation and evaluation; will to address the problem; material resources; and human and technical resources) had low readiness scores ( $< 5$ ; Fig. 1).

### 3.3. Participants' responses to RAP-CM and mean total scores, mean dimension scores, and ranking by country

Table 5 and Fig. 2 show the mean total scores, mean dimension scores, and ranking (in terms of readiness) for each country. Regarding dimension 1 (attitudes towards CMP), most of the key informants seemed to consider CMP as moderate to low priority when compared to other health and social problems. However, key informants in the UAE reported high readiness scores for this dimension. A one-way ANOVA [ $F(4, 239) = 11.39, (p < .001)$ ] followed by Tukey's HSD indicated that the mean score of the UAE in this dimension was significantly higher than were those for all other countries.

As for dimension 2 (knowledge of CMP), when the key informants were asked about the main risk factors for CM, 100% in Bahrain and Kuwait were able to report 1–5 different risk factors; slightly fewer were able to provide risk factors in the KSA (98.4%), Oman (98%), and UAE (97.8%). Key informants in all countries had high readiness scores in this dimension.

Notably, for dimension 3 (scientific data on CMP), the majority of the key informants reported that either the data quality was poor or that they did not know about the availability of data on the magnitude and distribution of CM. In general, all countries reported

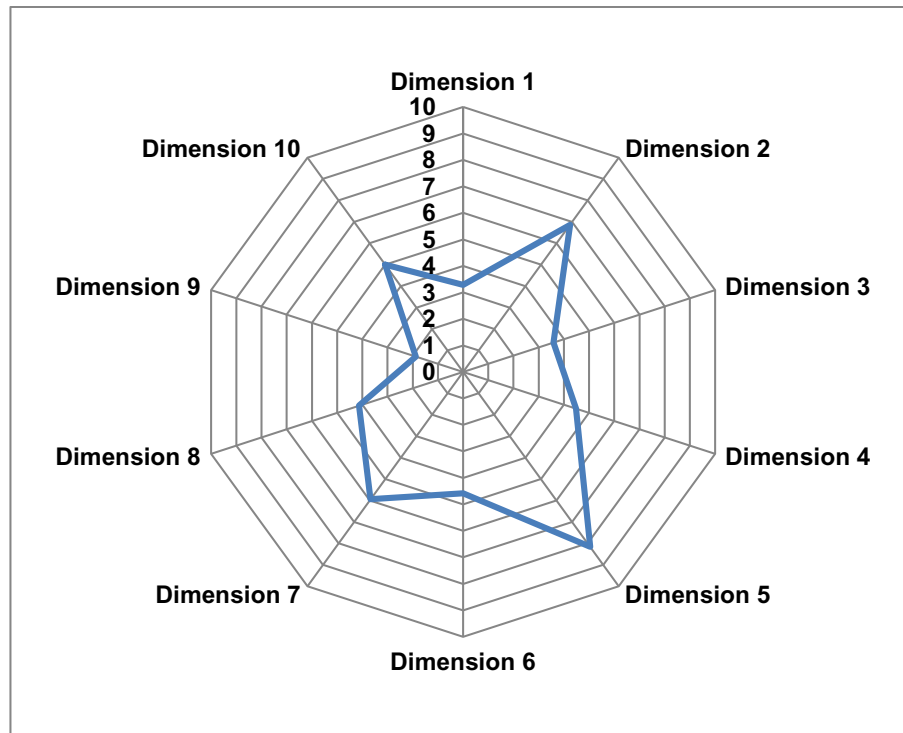


Fig. 1. Mean dimension scores (on a scale of 1–10) of the RAP-CM for Gulf Cooperation Council (GCC) countries.

low readiness scores for this dimension.

In regards to dimension 4 (current program implementation and evaluation), the majority of key informants in all countries could list a maximum of 3 programs when asked to list the names of CM programs that they knew were currently operating or had operated in the past. In this dimension, Kuwait's mean readiness score was significantly lower than were those of the other countries ( $p < .05$ ).

All countries reported high readiness scores in dimension 5 (legislation, mandates, and policies). Most key informants reported that there were governmental or nongovernmental agencies officially charged with CMP. Similar results were found in all countries regarding official policies that specifically address CMP.

In dimension 6 (will to address the problem), more than half of the key informants in Oman and UAE reported that there were political leaders who expressed strong commitment to CMP and

were taking effective measures to address CM. In contrast, less than a quarter of the key informants in Bahrain and Kuwait reported the existence of such leaders.

Regarding dimension 7 (institutional links and resources), the majority of key informants could list 1–5 or more institutions currently involved in the CMP. UAE's mean score in this domain was significantly higher than were the scores of Bahrain, Kuwait, and KSA ( $p < .05$ ).

Low readiness scores were reported in all countries for both dimension 8 (material resources) and dimension 9 (human and technical resources). For dimension 8, the majority of informants reported that either did not know whether there was a dedicated budget in the ministry of social welfare for CMP, or reported that there was no such budget. As for dimension 9, when the key informants were asked if the number of professionals specializing in CMP was adequate for the large-scale implementation of CMP

**Table 5**  
Mean total scores, mean dimension scores, and ranking by country.

|  | Dim. 1:<br>Attitudes        | Dim. 2:<br>Knowledge | Dim. 3:<br>Scientific<br>data   | Dim. 4:<br>Program<br>implementation | Dim. 5:<br>Legislation | Dim. 6:<br>Will to<br>address   | Dim. 7:<br>Institutional<br>links | Dim. 8:<br>Material<br>resources | Dim. 9: Human<br>and technical<br>resources | Dim. 10:<br>Informal<br>social<br>resources | Total<br>score<br>(max.<br>100) | Rank |
|--|-----------------------------|----------------------|---------------------------------|--------------------------------------|------------------------|---------------------------------|-----------------------------------|----------------------------------|---|---|---------------------------------|------|
| Bahrain  | 3.27                        | 7.22                 | 4.50                            | 4.50                                 | 7.88                   | 3.83                            | 5.22                              | 3.83                             | 1.22  | 5.16  | 46.55                           | 4    |
| Kuwait   | 1.94                        | 6.22                 | 2.44                            | 2.44                                 | 6.61                   | 3.00                            | 4.94                              | 3.94                             | 2.05  | 5.72  | 39.17                           | 5    |
| Oman   | 2.90                        | 7.55                 | 3.06                            | 5.10                                 | 9.08                   | 5.35                            | 6.12                              | 3.46                             | 2.44  | 5.15  | 50.17                           | 2    |
| KSA  | 2.83                        | 7.04                 | 3.75                            | 5.16                                 | 8.29                   | 4.37                            | 5.79                              | 4.83                             | 1.66  | 3.75  | 47.40                           | 3    |
| UAE  | 5.44                        | 6.27                 | 4.16                            | 5.22                                 | 8.94                   | 6.33                            | 7.61                              | 4.61                             | 2.05  | 5.05  | 55.60                           | 1    |
| Mean   | 3.28                        | 6.86                 | 3.58                            | 4.48                                 | 8.16                   | 4.58                            | 5.94                              | 4.13                             | 1.88  | 5.00  |                                 |      |
| ANOVA  |                             |                      |                                 |                                      |                        |                                 |                                   |                                  |   |   |                                 |      |
| F  | 11.39                       | 3.88                 | 5.60                            | 7.08                                 | 5.96                   | 9.78                            | 6.30                              | 4.09                             | 3.28  | 2.76  | 9.54                            |      |
| p  | <0.001                      | <0.01                | <0.001                          | <0.001                               | <0.001                 | <0.001                          | <0.001                            | <0.01                            | <0.05                                       | <0.05                                       | <0.001                          |      |
| Tukey HSD<br>post hoc<br>test<br>( $p < .05$ ) | UAE > Bh,<br>Ku, Om,<br>KSA | Bh > UAE<br>Om > UAE | Ku < Bh,<br>KSA, UAE<br>Bh > Om | Ku < Om, KSA,<br>UAE                 | Ku < Om,<br>KSA, UAE   | UAE > Bh,<br>Ku, KSA<br>Om > Ku | UAE > Bh,<br>Ku, KSA              | Ku < KSA,<br>UAE                 | Om > Bh                                     | Ku > KSA                                    | UAE > Bh,<br>Ku, KSA            |      |

Bh = Bahrain; Ku = Kuwait; Om = Oman; KSA = Kingdom of Saudi Arabia; UAE = United Arab Emirates



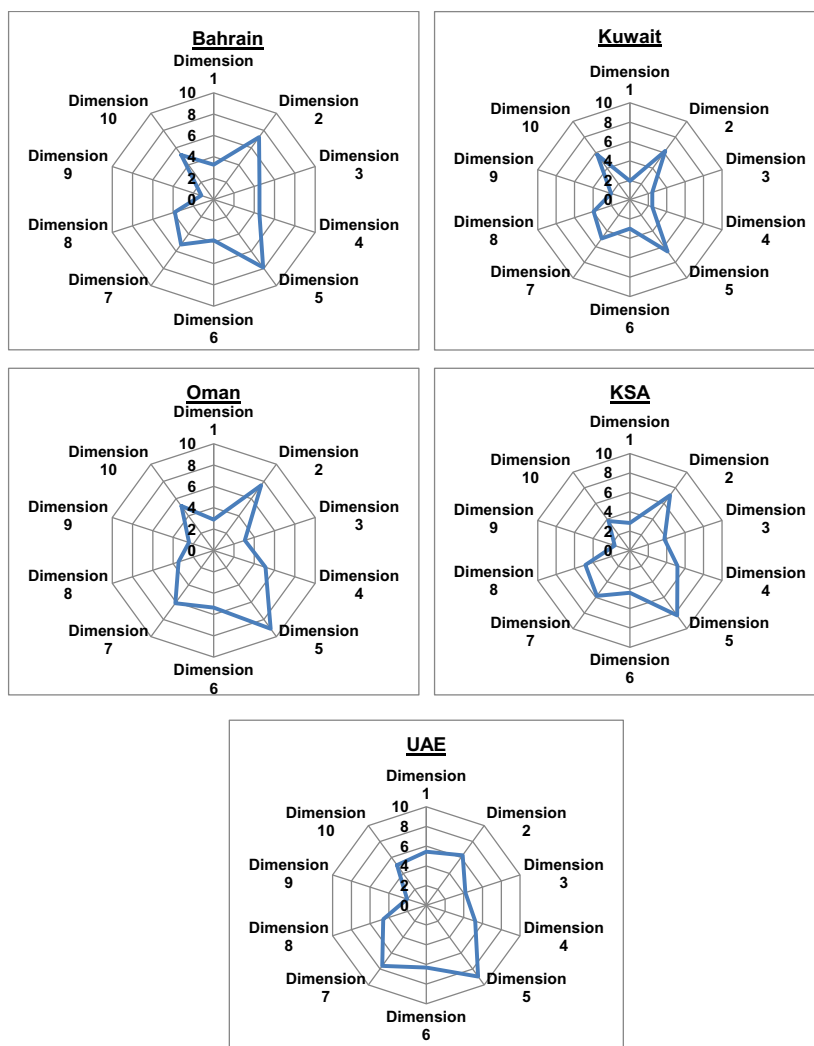


Fig. 2. Mean scores (scale of 1–10) of each dimension among all participants by country.

programs, most reported in the negative: these resources were either inadequate or nonexistent.

Finally, in dimension 10 (informal social resources), most of the key informants reported that the level of citizen participation in addressing various health and social problems was moderate to high. All countries except the KSA reported high readiness scores.

#### 4. Discussion

To the best of our knowledge, this study is the first to examine readiness for the implementation of large-scale evidence-based CMP programs in the GCC countries. Our analysis of the mean dimension scores in each country produced three major findings. First, three of the dimensions (knowledge of CMP; legislation, mandates, and policies; and informal social resources) had high scores consistently across the countries. Second, four dimensions (attitudes towards CMP; scientific data on CMP; material resources; and human and technical resources) had low scores across the countries. Finally, three dimensions (current program implementation and evaluation; will to address the problem; and institutional resources and links) had mixed scores across the countries.

##### 4.1. Dimensions with overall high scores

###### 4.1.1. Dimension 2 (knowledge of CMP)

High scores on the knowledge of CMP dimension indicated that key informants were aware of the consequences of CM and its underlying risk factors. This high score is most likely the result of increased awareness of CM among professionals, as a result of various formal and informal educational activities in each of the countries. However, this did not appear to have been reflected in informants' scores on attitudes towards CMP, which were consistently low across the countries; furthermore, most key informants believed that CMP has a moderate to low priority compared to other health and social problems. This calls for the need to focus specifically on the need for CMP and evidence-based programs in any future formal and informal education programs.

###### 4.1.2. Dimension 5 (legislation, mandates, and policies)

This dimension exhibited a remarkably high score in all countries. We expect this finding to be mainly due to the enactment of child protection laws, which are considered a milestone in the CMP field. These laws are local translations of the United Nations Convention on the Rights of the Child (CRC), a treaty defining CM

and deviant behaviors among children; the right of the child to be protected; prohibitions relating to the protection of the child and the responsibilities towards him/her; and the mandatory reporting of cases of maltreatment and the penalties of violating the law. These laws define the rights of every child, regardless of nationality, race, and religion, and are meant to ensure equality, care, and protection from all forms of maltreatment. Other relevant laws include laws of protection from abuse, which stipulate methods of protection from maltreatment through assistance and treatment; the provision of shelter and social welfare; various psychological, health-related, and regulatory requirements; and the necessary legal procedures to question and punish offenders.

#### 4.1.3. Dimension 10 (informal social resources)

The findings for this dimension indicate that people are generally motivated to volunteer in social service programs and want to include them as part of training and development. This finding is perhaps a reflection of the inputs of various ministries in CMP and the active roles of NGOs in the country. Indeed, NGOs have always been at the forefront of advocating for child rights and CMP. In the KSA, the informal social resources score might be improved by enhancing inter-sectoral collaboration for preventing and combating CM, as well as by increasing the number and power of NGOs focused on children's rights.

### 4.2. Dimensions with overall low scores

#### 4.2.1. Dimension 1 (attitudes towards CMP)

Our results clearly indicate that professionals are not satisfied with the level of commitment and efforts directed toward addressing CMP in their country in diverse sectors (both governmental and nongovernmental). This finding possibly reflects the expectations of professionals working in this field, who might set a high benchmark for the quality of CMP services. In addition, there is widespread belief among professionals that CMP is not as much of a priority as other health problems such as obesity, diabetes, and heart disease. However, in the UAE, both the government and various leaders appear to strongly believe in the importance of supporting social issues for future generations, such as by allocating higher budgets and encouraging the development of more partnerships and programs to tackle this issue. These beliefs likely influenced informants' attitudes towards CM and whether they prioritized it over other health issues.

Overall, the findings concerning attitudes towards CMP are not conducive to the implementation of large-scale CMP programs. We suggest devising media campaigns emphasizing the seriousness and urgency of CM to policymakers and law enforcement agencies. Potentially, this could improve their attitudes towards the problem.

#### 4.2.2. Dimension 3 (scientific data on CMP)

The lack of reliable national data on CM has a direct impact on all the other dimensions—in particular, it hinders knowledge production and policy development. Obtaining these data is a key determinant for realizing the extent of the issue and allocating resources to the implementation of CMP. We think that a particularly pressing need is for national surveys to identify the prevalence of all forms of CM and to assess its risk factors and consequences.

In the KSA, despite the magnitude of the problem, research on CM is still in its early stages. Professionals are now more aware of the importance of conducting research that abides by best practices in terms of method selection, research design, and reporting of results to both the academic community and decision-makers. Although population-based studies and research are scarce in the KSA, many research institutes are conducting small-scale studies measuring the prevalence of CM or examining the characteristics of

CM cases. Established data collection systems are also in place, with many governmental institutions beginning to collect their own data and developing their own CM databases.

In Oman and Kuwait, on the other hand, many key informants did not appear to be aware of a nationwide registry of CM data. Furthermore, the cooperation of all sectors interested in CMP in collecting relevant data has not been fully implemented yet, which adds more challenges.

4.2.2.1. *Dimension 8 (material resources)*. Interestingly, the majority of the key informants did not believe that the Ministry of Social Welfare or any other ministries had a dedicated budget for CMP, or did not know the situation. The availability of material resources and specific budgets for CMP is of primary importance for every government to show improvements in the CM field. This dimension was considered one of the most critical because it has a strong influence on other dimensions, such as current program implementation and evaluation and supporting institutional links. Social welfare typically plays a major role in supporting CMP programs, and the lack of a relevant budget makes it difficult to implement community-wide CMP programs. This dimension could be improved by coordinating with the government to allocate a fixed and specific budget for preventing and combatting CM.

#### 4.2.3. Dimension 9 (human and technical resources)

The low scores in this dimension may be partly explained by the fact that nationwide CMP programs are, in general, a relatively new concept, and that professional training to support child protection and prevention has only started in the last few years. The vast majority of the key informants reported that the number of professionals specializing in CM was inadequate or nonexistent, or simply did not know about the status of such professions; a few described it as “neither adequate nor inadequate.” Furthermore, most reported being unaware of any program or believed that there are no undergraduate or postgraduate educational institutions that devote some of their curriculum to CMP. Specialized expertise can be developed in these countries by providing interdisciplinary training programs focused on in-service training or graduate and postgraduate education in the identification and management of CM cases, as well as by encouraging young scientists to conduct research on CM.

### 4.3. Dimensions with mixed scores

#### 4.3.1. Dimension 4 (current program implementation and evaluation) and dimension 7 (institutional resources and links)

Several countries showed high scores for both dimension 4 and dimension 7, which are closely linked. Governmental and nongovernmental institutions in several countries have begun addressing the problem of CM through the initiation and operation of various awareness and advocacy activities. Indeed, in the past few years, the child protection sector has seen major improvements, particularly in terms of the implementation of CMP programs. In Oman, for instance, the Ministry of Social Development (MOSD) launched child protection committees with representatives from different governmental and nongovernmental institutions, thereby enhancing the links between these institutions [24].

In addition, in the KSA in 2013, the NFSP initiated the “shaken baby syndrome” prevention program, which was then adopted by the Ministry of Health (MOH) to be applied in all hospitals in the country. Furthermore, in 2015, the NFSP began an anti-bullying program that aimed to spread awareness of the negative consequences of bullying among children and adolescents. The bullying program was then adopted by the Ministry of Education (MOE) to

be applied in all schools in the KSA.

In the UAE, the “Aqdar” program was established to help children develop personal skills, prevent crimes, raise families’ awareness about health and safety issues such as cyber bullying and threats to children through exposure to inappropriate content. Aqdar (2015) is an exceptional example of an effective partnership because it was implemented by the Ministry of the Interior (MOI) on a large scale in partnership with many other institutions [25]. Moreover, the Supreme Council for Motherhood and Childhood (SCMC) developed a program in collaboration with UNICEF and the MOE to protect children in the UAE from bullying [26].

Some of the countries—Bahrain and Kuwait had low scores in these dimensions. The programs available in these countries mainly take the form of campaigns and small-scale workshops, which are ineffective or insufficient to address CMP as a whole. These programs might also be done sporadically or in an ad hoc manner, as opposed to being well-planned, well-resourced national programs. Furthermore, none of these programs have been evaluated for effectiveness. The development and implementation of large-scale programs is needed to demonstrate tangible improvements in CMP. In addition, an adequate number of staff should be trained, coupled with the provision of adequate resources, which many key informants considered inadequate for the implementation of large-scale CMP programs. Building the capacity of stakeholders, educating the public, ensuring closed communication between relevant groups, cultivating proper team work, and allowing for sufficient transparency to build an early culture for this national priority are all good moves towards improving CMP.

#### 4.3.2. Dimension 6 (will to address the problem)

Besides providing sufficient financial support to social issues, the UAE scored high on dimension 6, with key informants noting that there are many influential national figures and political leaders who express a commitment to facing CM, such as by approving the child protection law, promoting human development through investment in education, and building knowledge capacity to cultivate future leaders in both the public and private sectors [27]. It has also established various bodies focusing on CMP, such as the Social Support Centers, Centers for Rehabilitation and Employment of People with Special Needs, and the MOI’s Child Protection Center [28].

In contrast, the majority of the key informants in Bahrain, Kuwait, and KSA did not know if there were political leaders expressing a strong commitment to CMP, or believed that no such leaders existed. This finding is perhaps due to the fact that rather few influential national figures (including politicians, decision-makers, and legislators) actually have the will to fight CM or become champions of the cause. It is important to mention that having a desire to address the problem might have a major impact on the other dimensions, particularly the human and technical resources dimension and the material resources dimension. Striving to engage political leaders who champion CMP efforts requires intensive, delicate advocacy work from professionals in the field, with a focus on delivering concise and convincing messages about the impact of CM on children, their communities, and overall economic burdens to society. These countries’ will to address CMP could be enhanced by engaging more influential national figures to advocate for child rights and the fight against CM. Such activities might influence the government and result in the allocation of more funds to this issue.

## 5. Conclusion

GCC countries overall have moderate-to-fair readiness to implement large-scale evidence-based CMP programs.

Strengthening several dimensions is necessary to improve these countries’ readiness to implement such programs. Particularly, we advise that public education campaigns be launched in order to raise awareness of the seriousness of CM and its prevention. National surveys should also be carried out to assess the magnitude of CM in the GCC countries. Finally, specifically tailored and evidence-based CMP programs should be implemented at the national level towards different target groups, including children, caregivers at risk, and the general population.

## Conflicts of interest

This is to declare that all authors have no conflict of interest.

## Funding

The authors would like to thank King Abdullah International Medical Research Center (KAIMRC) for their financial support of this study with grant number - RC15/067.

## Ethical statement

The study was approved by the Institutional Review Board (IRB) of King Abdullah International Medical Research Center (KAIMRC) (RC15/067). Candidates determined to be eligible to participate were fully informed about the study, their right to refuse or withdraw, and all procedures put in place to ensure the privacy of the interviews. They were asked (individually and separately) to review an informed consent statement before agreeing to participate in the study. Prior to providing their consent, they were again told the nature of the study and given more information on the types of question that they would be asked. Subsequently, the participants either signed or initialed the informed consent form.

In this study, all data comprised participants’ answers to a quantitative survey. Data were collected only for the purposes of this study, and were not used for other purposes. A number of steps were taken to protect participants’ confidentiality: (1) All project staff received ongoing supervision in areas related to ethical conduct, confidentiality protection, and other issues in human subject protection; (2) the survey forms did not contain participants’ names, and instead were labeled with reconstructable personal alphanumeric identifiers; (3) all data were stored in a locked cabinet or designated computer with an access-limited locked hard drive at the National Family Safety Program (NFSPP); and (4) a hard copy of the information was stored in a locked cabinet that did not contain any other data.

Governmental bodies and non-government organizations (NGOs) dealing with child maltreatment prevention (CMP) are expected to directly benefit from this study; by contrast, there were no direct benefits to participants. The study is expected to indirectly benefit health educators, social workers, research groups, and individual researchers. Participants did not experience any psychological distress or harm as a result of answering the interview questions.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijpam.2019.07.009>.

## References

- [1] Back SE, Jackson JL, Fitzgerald M, Shaffer A, Salstrom S, Osman MM. Child sexual and physical abuse among college students in Singapore and the United States. *Child Abuse Neglect* 2003;27:1259–75. [https://doi.org/10.1016/S0145-2875\(03\)00075-9](https://doi.org/10.1016/S0145-2875(03)00075-9)



- 1016/j.chiabu.2003.06.001.
- [2] Monnat SM, Chandler RF. Long term physical health consequences of adverse childhood experiences. *Sociol Q* 2015;56(4):723–52. <https://doi.org/10.1111/tsq.12107>.
  - [3] World Health Organization. World Health Organization says violence against can and must be prevented. WHO Media Centre; 2006 [Retrieved 20 December, 2018]. Available from: <http://www.who.int/mediacentre/news/releases/2006/pr57/en/>.
  - [4] World Health Organization. Global status report on violence prevention [Retrieved 27 October, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/); 2014.
  - [5] Runyan DK, Shanker V, Hassan F, Hunter WM, Jain D, Paula CS, et al. International variations in harsh child discipline. *Pediatrics* 2010;126:e701–11. <https://doi.org/10.1542/peds.2008-2374>.
  - [6] Al-Mahroos FT, Al-Amer E. Reported child sexual abuse in Bahrain: 2000–2009. *Ann Saudi Med* 2011;31:376–82. <https://doi.org/10.4103/0256-4947.83218>.
  - [7] Al-Mahroos FT. Child abuse and neglect in the Arab peninsula. *Saudi Med J* 2007;28:241–8.
  - [8] Al-Ateeqi W, Shabani I, Abdulmalik A. Child abuse in Kuwait: problems in management. *Med Princ Pract* 2002;11:131–5. <https://doi.org/10.1159/000063241>.
  - [9] Koul RL, Chacko A, Al-Lamki Z, Al-Amri AM, Al-Khusaiby S. Munchausen syndrome by proxy. *Saudi Med J* 2000;21:482–6.
  - [10] Al Gharaibeh F, Al Farsi B, Almidfa A. Violence against children in United Arab Emirates. Dubai: Dubai Foundation For Women and Children; 2015.
  - [11] Al-Eissa MA, Saleheen HN, Almadani S, AlBuhairan FS, Weber A, Fluke JD, et al. Determining prevalence of maltreatment among children in the kingdom of Saudi Arabia. *Child: Care, Health, and Development* 2016;42(4):565–71. <https://doi.org/10.1111/cch.12325>.
  - [12] Mikton C, Burchart A. Child maltreatment prevention: a systematic review of reviews. *Bull World Health Organ* 2009;87:353–61. <https://doi.org/10.2471/BLT.08.057075>.
  - [13] Centers for Disease Control and Prevention. Preventing child maltreatment through the promotion of safe, stable, and nurturing relationships between children and caregivers. Atlanta, GA: Author; 2017 [Retrieved 17 August, 2018]. Available from: [https://www.cdc.gov/violenceprevention/pdf/cm\\_strategic\\_direction-long-a.pdf](https://www.cdc.gov/violenceprevention/pdf/cm_strategic_direction-long-a.pdf).
  - [14] Almuneef M, Qayad M, Noor I, Al-Eissa M, AlBuhairan F, Inam S. Multidimensional model to assess the readiness of Saudi Arabia to implement evidence based child maltreatment prevention programs at a large scale. *Child Abuse Neglect* 2014;38(3):527–32. <https://doi.org/10.1016/j.chiabu.2013.08.001>.
  - [15] Mikton C, Power M, Raleva M, Makoe M, Al Eissa M, Cheah I, et al. The assessment of the readiness of five countries to implement child maltreatment prevention programs on a large scale. *Child Abuse Neglect* 2013;37(12):1237–51. <https://doi.org/10.1016/j.chiabu.2013.07.009>.
  - [16] Raleva M, Filov I, Trpchevska L, Coneva A, Peshevska DJ, Isjanovska R. Report on child maltreatment prevention readiness assessment in Republic of Macedonia. Geneva: World Health Organization; 2012 [Retrieved 1 August, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/fyrom\\_rap\\_cm.pdf?ua=1](http://www.who.int/violence_injury_prevention/violence/child/fyrom_rap_cm.pdf?ua=1).
  - [17] Almuneef M, Qayad M, Inam S, Al-Eissa M, AlBuhairan F, Noor I. Child maltreatment prevention readiness assessment country report: Saudi Arabia [Retrieved 14 May, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/saudi\\_arabia\\_rap\\_cm.pdf?ua=1](http://www.who.int/violence_injury_prevention/violence/child/saudi_arabia_rap_cm.pdf?ua=1); 2012.
  - [18] Cardia N, Laggata P, Affonso C. Child maltreatment prevention readiness assessment country report: Brazil. Geneva: World Health Organization; 2012 [Retrieved 10 June, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/brazil\\_rap\\_cm.pdf?ua=1](http://www.who.int/violence_injury_prevention/violence/child/brazil_rap_cm.pdf?ua=1).
  - [19] Guat Sim IC, Wan Yuen C. Child maltreatment prevention readiness assessment in Malaysia: country report. Geneva: World Health Organization; 2012 [Retrieved 5 March, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/malaysia\\_rap\\_cm.pdf?ua=1](http://www.who.int/violence_injury_prevention/violence/child/malaysia_rap_cm.pdf?ua=1).
  - [20] Makoe M, Roberts H, Ward CL. Child maltreatment prevention readiness assessment: South Africa. Geneva: World Health Organization; 2012 [Retrieved 7 May, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/south\\_africa\\_rap\\_cm.pdf?ua=1](http://www.who.int/violence_injury_prevention/violence/child/south_africa_rap_cm.pdf?ua=1).
  - [21] Mikton C, Mehra R, Butchart A, Addiss D, Almuneef M, Cardia N, et al. Multidimensional model for child maltreatment prevention readiness in low- and middle-income countries. *J Community Psychol* 2011;39(7):826–43. <https://doi.org/10.1002/jcop.20474>.
  - [22] World Health Organization. Handbook for the readiness assessment for the prevention of child maltreatment (RAP-CM). Geneva: World Health Organization; 2013 [Retrieved 15 November, 2018]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/child/handbook\\_rap\\_cmp.pdf](http://www.who.int/violence_injury_prevention/violence/child/handbook_rap_cmp.pdf).
  - [23] SPSS inc.(version SPSS 20.0 for windows). Chicago,IL: SPSS Inc; 2013.
  - [24] Ministry of Social Development. Executive summary for the third and fourth reports on the Convention on the rights of the child [Retrieved 1 July, 2018]. Available from: <https://www.mosd.gov.om/>; 2014.
  - [25] Aqdar Program. About the program [Retrieved 20 March, 2018]. Available from: <http://www.aqdar-uae.com/>; 2015.
  - [26] The Supreme Council for Motherhood and Childhood (SCMC). Anti-bullying program implemented in 64 public and private schools in the country [Retrieved 2 May, 2018]. Available from: <http://scmc.gov.ae/news/details/2051>; 2016.
  - [27] United Arab Emirates Cabinet. Cabinet members: his highness sheikh mohammed bin rashid Al maktoum [Retrieved 20 February, 2018]. Available from: <https://www.uaecabinet.ae/en/details/cabinet-members/his-highness-sheikh-mohammed-bin-rashid-al-maktoum>; 2016a.
  - [28] United Arab Emirates Cabinet. Cabinet members: lieutenant general his highness sheikh saif bin zayed Al nahyan [Retrieved 20 February, 2018]. Available from: <https://www.uaecabinet.ae/en/details/cabinet-members/lieutenant-general-his-highness-sheikh-saif-bin-zayed-al-nahyan>; 2016b.