

# QUALITY OF PARENTING AND EFFECTIVENESS OF AN EDUCATIONAL INTERVENTION TO IMPROVE PARENTING AMONG PARENTS OF 13-15 YEAR OLD SCHOOL GOING ADOLESCENTS IN JAFFNA DISTRICT

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## Abstract

World Health Organisation (WHO) identified parenting intervention as the first strategy to improve adolescent health. The objectives of the study were to develop and validate a tool to describe parenting in selected dimensions, to describe parenting and its associated factors among parents of 13 to 15 year old schooling adolescents and to assess the effectiveness of a parenting intervention. The study comprised of three components. Component one developed and validated a self administered tool to describe the patterns of parenting- Parenting Patterns Questionnaire (PPQ) by, item selection, expert consensus and item analysis. In the component 2, a descriptive cross sectional study was carried out among 1863 schooling adolescents, in 97 clusters, by multi stage cluster random sampling probability proportionate to student population in different types of school and age group. In the third component, a Parenting Education Package was designed and a randomised control trial was conducted to assess the effectiveness of intervention with a sample of 73 parents each group. The data analysis was done using SPSS 15. The PPQ is a reliable and valid tool to assess parenting in selected dimensions (connection, control and respect) in Jaffna district. According to PPQ, parenting was good among 23.1% of parents. Factors such as age and sex of the child, educational level and occupation of parents, substance use of fathers and domestic violence were associated with quality of parenting. Improvement was achieved in parenting by intervention in 3 month period.

Keywords: Parenting, adolescent health, parenting interventions.

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## INTRODUCTION

Parenting is defined as rearing of a child or children especially the care, love and guidance given by the parent (American Heritage Dictionary 2009). It is a construct which cannot be defined easily and is understood by different cultures differently. Parenting is predominantly seen as a task about the socialization of the children within the community that considers children in relation to their families, neighbourhood and the wider community (White 2005).

Parenting usually involves biological parents but teachers, carers, nurses and others can fulfill parenting tasks (Long 1996). Parenting is a multi dimensional topic which is molded by many cultural and social issues, but the basic principles of good parenting practices remain same among different societies (Schwartz-Kenney et.al 1999).

Parenting is culturally related and the perceptions of children are also different from culture to culture. Studies highlight important parenting differences between European and Asian Americans (Van and Russel 2010). Parenting is assessed usually by the

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way the good parenting is defined by Western culture. In the United States what most people consider as 'good parenting' is based on middle class European American behaviours (Van and Russel 2010). Even though in the Western culture authoritative parenting is seen as likely to promote adolescent's wellbeing, it is not necessarily more beneficial than authoritarian parenting which is practised by much Asian culture (Russel et al 2010). In addition the children's perception or understanding of good parenting or the support and love from the parents, is also different culture to culture.

Among Sri Lankan Tamil families, family interests are prioritised over individual interests (Sivarajah 1998, Kendall 1989). The advice on child rearing is obtained by older relatives and friends.

The main dimensions of parenting identified by the WHO (2007) are 'Connection (love)' which is an emotional bond between parent and child, 'Behaviour control which includes regulation, monitoring, structure and limit – setting, encompasses parents' actions aimed at shaping or restricting adolescents' behaviours, 'Respect for individuality ( respect)' which involves allowing the adolescent to develop a healthy sense of self, apart from his or her parents, 'Modeling for appropriate behavior ( model)' which includes modeling according to the social norms and culture and 'Provision and protection (provide)' which refers to parents' provision of the resources that they can and seeking out resources when they can't.

One old method of classification of parenting was according to the parenting styles by Baumrind (1966). She identified 3 parenting styles depending on responsiveness and demanding; Authoritative, Authoritarian and Permissive parenting styles. On the other hand Maccoby and Martin (1983) have expanded these three into four parenting styles; authoritative, authoritarian, permissive and neglectful styles.

Authoritative parenting style is characterised by high parental responsiveness and high parental demands. In Authoritarian parenting style the parent is demanding but not responsive. The parent is responsive but not demanding in permissive style. The parent is neither responsive nor demanding in neglectful style. Numerous studies show that

authoritative style brings good outcomes among adolescents (Sanavi et al 2013, Strafstrom 2014, Hoffman and Bahr 2014) while some other researchers have found out that, in some cultures and ethnicities (Asian American families) authoritarian style may be associated with more positive child outcomes than Baumrind expects (Santrock 2007).

Socio demographic, economical and environmental factors related to parents and family and maternal depression distort the parenting severely (WHO 2007). Among the factors, culture, educational level, occupation and substance use of parents and domestic violence and economic status of family are important.

### **Adolescents and Parenting Global situation**

Adolescence is a transition period between childhood and adulthood which extends from age 10 to 19 years (WHO 2007). According to WHO definition, the early adolescent period is between ages 10 and 13, mid adolescent between ages 14 and 17 and late adolescent between ages 18 and 19. Nearly 1.2 billion people in the world fall in this age group and the majority is living in developing countries (Yakandawala Ranatunga 1999). During this period dramatic physical and psychological changes are taking place and they physically and psychologically mature and develop their own identity. Many of the adolescents try to escape from the environment centered on home (controlled by their parents) and to enter a new world of freedom with company of peers. Experimentations and adoption of behaviours initiate during this period, may cause threat to their future life (UNICEF 2004).

Globally main health problems of adolescents include early pregnancy and child birth, HIV, violence, alcohol and drugs, road traffic accidents, malnutrition and obesity, less exercise, and tobacco use (WHO 2014).

Parenting is the single most important variable involve in childhood illnesses, accidents, teenage pregnancy, substance misuse, child abuse, juvenile crime and mental illness (Masud 1998).

### **Sri Lankan situation**

In Sri Lanka adolescents account for 3.7 million, which is 19.7% of the population and out of them 73% are attending schools (UNICEF 2004). In the

national survey carried out in 2004 (UNICEF), level of life skills, factors affecting life skills, substance abuse knowledge on reproductive health, sexual behavior, sexual abuse and vulnerability to STDs, HIV/AIDS of adolescents between ages 10 and 19 were found remarkably high.

### **Parenting assessment and Education / Interventions**

The assessment of parenting is done using different terminology such as quality of parenting assessment, parenting capacity assessment, parenting competence assessment, etc. Whatever the term is used, the ultimate objective is to assess whether the parenting provides the safe and good psychosocial environment to the children

The challenge identified in most of the assessments is the validity. The recommended way to assess parenting capacity is to use combination of methods such as using tools and interviews and to take context into consideration (White 2005). Even though the assessment is difficult, parenting programmes proved effective in much literature (Kevin et al 2013).

The WHO (2014) identified that programmes to help strengthen ties between adolescents and their families are important. The WHO (2007) established stronger evidence base now, for interventions, to avert behaviours that undermine health have to be directed both to adolescents themselves and to the environments in which they live, grow and learn.

A parent education program is a course that can be followed to correct and improve a person's parenting skills. Such courses may be general, covering the most common issues parents may encounter, or specific, for infants, toddlers, children and teenagers. Even though parenting is an inborn art the interventions prove improvements in parents' and children's well being.

Worldwide the programmes are delivered in different modes such as short courses conducted in children centres, schools etc, education by phone, online courses, individual discussions for different length of period depending on the context. Most of the times, after the interventions the post interventional assessment is conducted immediately and follow – up assessment (to assess the sustainability) 10 weeks

after the intervention and the results showed improvement of parenting skills and practices (Directory of local parenting programmes 2009).

### **METHODOLOGY**

The study was carried out in Jaffna district in Northern Province of Sri Lanka. It caters about 600,000 residential populations and around 140,000 of adolescents (Statistical Hand book 2010). The total student population in Jaffna district is 128,430 (Ministry of Education 2012). The study population comprised of students aged 13-15 years attending schools in Jaffna district. There were 9327, 10155 and 10283 students in grades 8, 9 and 10 respectively in 2013 (Northern Education Sector Vital statistics 2012). There were 44 Type I AB schools, 48 Type IC schools and 152 Type II schools. It was a descriptive cross sectional study with an intervention study component.

Phase I of the study was development and validation of a questionnaire to describe the patterns of parenting among parents of 13-15 year old school going adolescents in Jaffna district.

Phase II of the study was a descriptive cross sectional study to describe the patterns of parenting and the socioeconomic, demographic and environmental factors associated with parenting among parents of 13-15 year old schooling adolescents in Jaffna district, using the instrument developed in phase I.

Phase III was a randomized controlled trial, to assess the effectiveness of an intervention to improve the parenting.

The phase I of the study consisted of two steps

- Development of the scale (Parenting Patterns Questionnaire (PPQ)).
- Validation of the scale

The development of the scale, Parenting Patterns Questionnaire (PPQ) was done in four stages.

- **Stage I:** Devising a range of items suitable for the preliminary draft of the PPQ from literature and by generating new items by Focus Group Discussions and In Depth Interviews

- **Stage II:** Formulation of items and response categories for the preliminary draft of the PPQ.
- **Stage III:** Pre test of the questionnaire
- **Stage IV:** Application of item reduction procedures (reliability analysis) to select the most suitable set of items for the final draft of the PPQ that will contribute to a good internal consistency

All the stages in the instrument development and validation process were designed according to the guidelines proposed by Streiner and Norman (2003). The summary of the development and validation of PPQ is shown in table 1.

Table 1: The summary table showing steps of development and validation of PPQ

| Steps   | Procedure of steps  | Participants  |
|---|---|---|
| Step I- Devising the items                            | Selection of suitable items from existing instruments by an opinion survey among a panel of experts (item list 1) | A consultant community physician, a consultant psychiatrist, a psychologist, a sociologist, an educationist and a 2 religious leaders<br>Adolescents, parents, school principal, psychologist, counselling teacher, a sociologist and a religious leader. |
|   | Generation of new items using FGDs and IDIs with relevant people (item list 2)                                    |   |
|   | Common item list (50 items)   |   |
| Stage II: Development of the preliminary draft of PPQ | Common item list (50 items)   | A consultant community physician, a consultant psychiatrist, a psychologist, a sociologist, an educationist<br><br>Tamil speaking students from Kilinochchi district  |
|   | (Expert panel & establishment of judgemental validity)  |   |
|   | Preliminary draft of the PPQ (35 items)   |   |
|   | Formulation of subscales and response categories and scoring  |   |
|   | Pre-testing   |   |
| Stage III: Development of the final draft of PPQ      | Item analysis   | Sample from the students of age 13,14, 15 from Kilinochchi district   |
|   | Final draft of PPQ (27 items)   |   |

In the descriptive cross sectional study (phase II) the patterns of parenting in selected dimensions and to identify the socioeconomic, demographic and environmental characteristics associated with parenting were described.

The study instrument was a self administered questionnaire, developed and validated by the Principal Investigator (PI). It comprised of two components; first component to gather the socioeconomic, demographic and environmental

characteristics which is associated with parenting and the second to describe the patterns of parenting - Parenting Patterns Questionnaire (PPQ).

**Sample size calculation**

Sample size was calculated by using the following formula (Lwanga and Lameshow 1991) as it is a prevalent study (1).

$$\text{Sample size (N)} = \frac{Z^2 \times P(1-P) \times D}{d^2}$$

Z = 1.96 (standard normal deviation for %  $\alpha$  error)

d = the degree of precision desired for margin of error was set at 0.05

Since there were no previous studies in this nature expected proportion with 'good parenting' is regarded as 50%

P = Expected proportion of parents with good parenting practices = 50%

D= Design effect.

b = Number in the cluster

Substituting the values in the above formula gives

N= 384

This sample was selected using multi stage cluster sampling method proportionate to the size of the student population in grade 8, 9, and 10 and Type I AB, Type IC and Type II schools. As cluster sampling method was used the clustering effect was overcome by multiplying by design effect.

Calculating the design effect also is done according to the paper on simplified general method of cluster sampling by (Bennet et. al 1991).

D= 1+ (b-1) rho

rho = 0.2 ; b=20

D= Design effect

b= cluster size

rho= measure of degree of homogeneity of study units within the cluster

Usually in a community based study rho ranges from 0.1 to 0.4 (Moser and Kalton 1971). As this is a school study the previous studies were looked for a suitable value for "rho" and design effect. Researchers used 0.2 for "rho" and got design effect of 4.8 (Amarasinghe 2000) for a similar study

population and similar sampling method and design effect 4 was used by Wijeratne (2012) for a similar study. To select a large enough sample size to overcome the design effect, 4.8 was gained substituting 0.2 to "rho".

D= 1+ (b-1) rho

rho = 0.2 ; b=20

D= 1+ (20-1) x 0.2 = 4.8

Effects due to cluster sampling method will be overcome by making a correction for design effect. N = 384 x 4.8 = 1843.2

A non response rate of 5% (92) was added to sample size.

Total sample = 1843+92 = 1935

Approximately a sample of 1935 schooling adolescents was needed for the study.

A classroom from grades 8, 9, 10 was considered as a cluster as almost all of the 13, 14, and 15 year old students are studying in grades 8, 9, and 10. The study comprised of clusters of 20 students each, because usually in Jaffna district, most of the classrooms consisted 20 students.

Total Number of clusters to be studied = 1935 / 20 = 97

As it is a school based study and it has to cover whole Jaffna district multi - stage stratified cluster sampling method was chosen (Hulley & Cummings 1998). Stratification was done according to the proportion of student population for each type of school and each grade under each type of the school.

The stratification was done according to the type of schools (1AB, 1C and type II), probability proportionate to the size of the population in grades 8, 9 & 10, in each type of school and number of clusters in each type of school were decided in Table 2

Table 2: Sample technique and the number of clusters

| Student Population (No of Clusters )<br>School type<br>Grades | Type1AB    | Type 1C   | Type 2     | Total      |
|---|------------|-----------|------------|------------|
| Grade 8   | 4252 (14)  | 2044 (6)  | 3031(10)   | 9327 (30)  |
| Grade 9   | 4293 (14)  | 2073 (7)  | 3789 (12)  | 10155 (33) |
| Grade 10  | 4507 (15)  | 2152 (7)  | 3624 (12)  | 10283 (34) |
| Total   | 13052 (43) | 6269 (20) | 10444 (34) | 29765 (97) |

(Source: Northern Province Educational Sector Vital Statistics 2012).

The phase III of the study was completed in two stages.

- Development of the parental Educational Package (PEP)
- Randomized control trial to assess the effectiveness of the PEP.

A comprehensive education package (PEP) on "parenting", based on the findings of the study, was designed. The aim of the PEP was to educate the parents about the nature of adolescents by educating them about the brain development of adolescents and how to handle them by making them understand the current problems of adolescents in the local context. The PEP included a VCD with undesirable and desirable behaviours captured from Tamil movies, a CD with few interviews with adolescents and a leaflet to educate the parents with 3 workshops to parents.

**Sample size:**

According to the formula described by Pocock (1983) the required number of study participants in each group, n, was calculated as follows (2).

$$n = \{p_1 (100- p_1) + p_2 (100- p_2)\} / (p_1- p_2)^2 \times f_{(\alpha,\beta)}$$

$p_1$  = proportion of parents with improved parenting quality in the control group after intervention period.

$p_2$  = proportion of parents with improved parenting quality in the intervention group after intervention period.

$\alpha$  = the level of significance used for detecting a difference set at 0.05 between intervention group and control group

$1- \beta$  = the degree of certainty that the difference ( $p_1- p_2$ ), if present, would be detected or the power set at 0.80

$f$  = a function of  $\alpha$  and  $\beta$  and equals to 7.9 when  $\alpha$  is 0.05 and  $\beta$  is 0.2

With the existing literature and the expert opinion 35 % improvement was expected in parenting as the intervention is done to a group parents with good, moderate and poor parenting. In the control group 5% improvement was expected in parenting.

Following values will be taken for  $p_1$  and  $p_2$

$p_1 = 0.05$  (a reduction of parents with poor parenting by 5% in the control group)

$p_2 = 0.35$  (a reduction of parents with poor parenting by 35% in the control group)

Thus the final calculated sample size is 24.

As the study was carried out by cluster sampling, the sample size was multiplied by design effect to overcome the cluster effect. Design effect was taken as 2 as only one type of school is included in the trial.

Therefore the final sample size was

$$N = 24 \times 2 = 48$$

48 study participants were allocated to each group.

10% was added to the sample size for non response (non availability for the assessment after intervention and also parents will not attend the intervention.) Therefore, the final sample size in each group consists of 53. Two Type IC schools from different zones were selected and all the parents were given parental education for the intervention school and other one was kept as control school.

### DATA ANALYSIS

Depending on the scores for PPQ the parents were categorised into good, moderate and poor for each dimension of parenting as in phase 2. Chi square test was used to find the associations of the factors with parenting. The proportions were calculated for pre intervention and post intervention and were compared to intervention and control groups separately by using Mc Nemar's test.

### RESULTS

#### Results of the Phase I

##### *Reliability of PPQ*

The reliability of the PPQ was confirmed by assessing the internal consistency and the test-retest reliability of the instrument. Internal consistency of the scale was assessed using Cronbach's alpha. An alpha value of 0.7-0.9 was considered as evidence to support good internal consistency of the instrument (Streiner & Norman, 2003). The results of internal consistency of the PPQ is shown in Table 3.

Table 3: Measures of Internal consistency of PPQ

| Measure     | No. of items | Cronbach's alpha Value | Mean inter item correlation |
|-------------|--------------|------------------------|-----------------------------|
| Subscale 1  | 15           | 0.801                  | 0.211                       |
| Subscale 2  | 06           | 0.800                  | 0.381                       |
| Subscale 3  | 06           | 0.845                  | 0.477                       |
| Whole scale | 27           | 0.805                  | 0.139                       |

All the subscales were found to have alpha values above 0.8, signifying high internal consistency. The overall PPQ also has an alpha value of 0.805.

The test-retest reliability of the instrument was measured by re-administering the instrument after two weeks from the initial administration, to a group of 30 children (which includes grade 8, 9, 10 and IAB, IC, type II) who were selected for the validation study. Good correlations were demonstrated for all three sub scales of PPQ and for the overall PPQ (>0.7). These results indicated that the PPQ has satisfactory repeatability.

Three forms of judgmental validity (Face validity, content validity and consensual validity of the PPQ) were established during the process of item generation. In addition, a qualitative validation (construct validity) was carried out as described in section 3.1.1.2.5, which further confirmed the validity.

#### Results phase II

A sample of 1976 eligible schooling adolescents aged 13-15 years were selected for the study, by cluster sampling method from the schools in the Jaffna district. All the parents of the selected children (1976) and all the children (1976) were sought for the consent; of them 44 parents and 16 children did not consent to participate in the study and 12 children were absent on the data collection day. Thus the non response rate was 3.72%. In addition 41 questionnaires were removed from analysis due to incompleteness. Thus, 1863 adolescents participated in the study were analysed.

#### The socio demographic characteristics of the parents

The mean age of mothers and fathers were 37.99 and 43.23 years respectively. Majority (99.7%) of the parents belonged to Tamil ethnicity and to Hindu religion. Of the parents alive, 17.4% (n=322) of mothers and 15.8% (n=279) fathers were educated up to tertiary level while 11.9% of mothers and 13.5% fathers studied up to primary only. Of the mothers approximately three quarter (n=1427, 77.3%) were house wives and one fifth (n=347, 18.8%) were either managers or professionals. Of the fathers 18.4% (n=324) were either managers or professionals while one quarter (n=454, 25.8%) were elementary

occupation holders. Majority (n= 1691, 90.8%) of the families, the income was less than Rs. 50000/= per month among those 60.5 % (n= 1127) was under Rs. 25000/=. Among the fathers 8.5% had a habit of alcohol intake more than 3-4 times per week and 14.2 % were smokers. Of the families of the participants, there was physical violence between parents among 90 % of the families.

**Patterns of parenting**

The patterns of parenting derived by each item of PPQ are described by means of components related to the selected parenting dimensions; connection,

control and respect. The 'Connection' is described by questions related to provision of advice and guidance, time spent for child, understanding of the child, praising the child, gives attention to the child, having open communication with child, supports the child in school work. The 'Control' is described by questions related to the monitoring and consistent control. The 'Respect' is described by questions related to ridiculing of the child, embarrasses the child in public, expects too much from the child, comparing the child with some body, ignoring the child, not respecting the child as a person. The patterns of parenting is summarised in Table 4.

*Table 4: Distribution of the study sample by patterns of parenting*

| Measures                                      | Always / every day |       | Frequently/sometimes |       | Rarely/never |       |
|---|--------------------|-------|----------------------|-------|--------------|-------|
|   | No.                | %     | No.                  | %     | No.          | %     |
| Chat with the child                           | 1295               | 69.5  | 470                  | 25.3  | 42           | 2.3   |
| Quality time spent with child                 | 728                | 39.1  | 700                  | 37.6  | 435          | 23.4  |
| Understanding of the child                    | 1125               | 60.38 | 416                  | 22.32 | 322          | 17.28 |
| Discuss about the child's problems            | 1008               | 54.1  | 550                  | 29.6  | 305          | 16.3  |
| Inspection of the school work                 | 994                | 53.4  | 606                  | 30.2  | 263          | 14.4  |
| Substance use                                 | 218                | 11.7  | 339                  | 18.2  | 1306         | 70.1  |
| Child abuse                                   | 308                | 16.5  | 422                  | 22.7  | 1133         | 60.8  |
| Advice on Physical changes during adolescence | 303                | 16.3  | 426                  | 22.8  | 1134         | 60.9  |
| Advice on Reproductive health issues          | 307                | 16.5  | 394                  | 21.2  | 1162         | 62.4  |
| Advice on Information Technology              | 797                | 42.8  | 635                  | 34.0  | 430          | 23.1  |
| Advice on Religious involvement               | 1453               | 78.0  | 327                  | 17.5  | 83           | 5.5   |
| Advice on Cultural values                     | 1100               | 59.0  | 545                  | 29.3  | 218          | 11.7  |
| Enquiring about the time spent outside        | 514                | 27.6  | 758                  | 40.7  | 591          | 31.8  |
| Habit of informing the place the child going  | 1255               | 67.4  | 415                  | 22.2  | 193          | 10.4  |
| Knowledge of child's friends                  | 545                | 29.3  | 674                  | 37.2  | 624          | 33.5  |
| Ridiculing the child by words                 | 158                | 8.5   | 393                  | 21.1  | 1312         | 70.4  |
| Punishing the child                           | 611                | 32.8  | 733                  | 39.5  | 519          | 27.9  |



|                                     |     |      |     |      |      |      |
|-------------------------------------|-----|------|-----|------|------|------|
| physically                          |     |      |     |      |      |      |
| Embarrasses the child in public     | 130 | 7.0  | 351 | 18.8 | 1382 | 74.2 |
| Comparing the child with some body  | 293 | 15.7 | 606 | 32.5 | 964  | 51.8 |
| Expects too much from the child     | 145 | 7.8  | 342 | 18.3 | 1376 | 73.9 |
| Not respecting the child's feelings | 154 | 8.3  | 351 | 18.9 | 1358 | 62.9 |

The level of parenting quality was assessed using the new instrument Parenting Patterns Questionnaire (PPQ). The instrument consisted of 27 items with a 5-point rating scale for each item which ranged from 1-5. The total PPQ score was calculated by summing up the scores of individual items and a higher value was thought to represent a good quality of parenting. Thus, the range of possible values for the parenting score was 27- 135.

The parenting received by the children was classified in to 3 levels: good, average and poor. The cut off thresholds for the different levels were determined based on the expert opinion. Each subscale and the whole scale were given separate cut off values. The values were decided by the expert panel according to the rate of scoring of the items and the number of items in each scale. The scores for each scale is presented in Table 5 in the following manner.

Table 5: Cut off for the quality of each dimension of parenting and for overall parenting

| Quality Scale | Good (>= number of items x 4) | Average ( number of items x 4 through number of items x 3) | poor(< number of items x 3) |
|---------------|-------------------------------|--|-----------------------------|
| Connection    | >= 60                         | 45 to 60   | < 45                        |
| Control       | >=24                          | 18 to 24   | <18                         |
| Respect       | >=24                          | 18 to 24   | <18                         |
| Whole         | >=108                         | 81 to 108  | <81                         |

The distribution of the levels of parenting in each subscale and the whole scale is given in table 6.

Table 6: Distribution of the study sample by quality of parenting

| Quality Parenting scales | Good |                    | Average |                   | Poor |                    |
|--------------------------|------|--------------------|---------|-------------------|------|--------------------|
|                          | No   | %                  | No      | %                 | No   | %                  |
| Scale 1 connection       | 954  | 51.2 (48.8 - 53.9) | 612     | 32.9 (30.7- 35.0) | 297  | 15.9 (14.2-17.6)   |
| Scale 2 control          | 442  | 23.7 (21.8-25.7)   | 614     | 33.0 (30.9-35.2)  | 807  | 43.3 (41.1-45.6)   |
| Scale 3 Respect          | 920  | 49.4 (47.1-51.7)   | 448     | 24.0(22.2-26.0)   | 495  | 26.6 (24.6-28.7)   |
| Overall                  | 430  | 23.1(21.2-25.0)    | 1152    | 61.8 (59.7-63.9)  | 281  | 15.1 (13.4 - 16.6) |

Little less than half (43.3%) of the parents are poor in control dimension of parenting and nearly quarter (26.6%) of them are poor in respect dimension. The overall parenting is good among 23.1 % of parents and moderate in 61.8% of them.

**The factors associated with parenting**

The relationship between parenting quality and selected variables were studied, in order to identify

the factors that are associated with parenting quality. For the analytic purposes to apply the statistical tests moderate and good parenting were amalgamated as satisfactory and poor was considered as it is.

The independent variables also were amalgamated whenever necessary for analysis and to locate the significant variation between groups

The parenting quality was found significantly associated with the educational level of the parents ( $p < 0.001$ ), occupation of parents ( $p < 0.01$ ), family income ( $p < 0.05$ ), and substance use by father ( $p < 0.01$ ), and intimate partner violence ( $p < 0.01$ ).

### **Effectiveness of intervention**

The proportion of satisfactory and poor parenting was compared before and after the intervention for each dimension and for the overall parenting using McNemar's test.

The parents in intervention group, have shown a significant improvement ( $P < 0.05$ ) in all three dimensions and in overall parenting.

## **DISCUSSION**

This study has developed and validated a tool to describe parenting patterns in Jaffna district Sri Lanka which is a purely Tamil community and described the parenting with an assessment of effectiveness of a parenting intervention.

The PI has developed and validated the PPQ for schooling adolescents of age 13 -15 years, in Jaffna district, according to the steps described by Strainer and Norman (2003). The newly developed tool, PPQ, has shown good internal consistency (Cronbach's alpha  $> 0.7$ ), test - retest reliability (Pearson's Correlation Coefficient  $> 0.9$ ) and validity. Development of the questionnaire was mainly done by devising the items from the existing tools in literature and generation of new items from the FGDs and IDIs. Same procedure was followed by researchers in Western countries in development and validation of parenting scales (David et al 1993, Campis et al 1996, Larios et al 2009). Sri Lankan researchers also followed the same procedures in development of tools for different purposes (Fernandopulle 2000, Wijesekara 2003, Amarasinghe 2011, Wijeratne 2012, Hettiarachchi 2013).

According to PPQ among 23.1% (CI : 21.2-25.0) of parents, overall parenting was good and among 51.2% (CI : 48.8 - 53.9), 23.7% (CI: 21.8-25.7) and 49.4% (CI: 47.1-51.7) of parents, parenting was good

in 'connection', 'control' and 'respect' dimensions respectively.

Nearly 74 % of the parents (at least one parent) spends a quality time (without involving in any other task) while 11.2 % reported that the parents didn't spend a quality time at all. Of the adolescents 82.7 % of the children agree that at least either of their parents understand them but little more than two thirds of adolescents (70.2%) reported that either of their parents had open communications with them according to the current study. Little more than half of the parents (54%) participate in the school and educational activities of the children. Nearly half of the parents (55%) monitor the day to day activities of the children and nearly two thirds of the parents monitor the child's friends. According to the current study, more than 60% of adolescents didn't get any advice on physical changes during adolescence, sexual and reproductive health or child abuse from at least one of their parents. Regarding electronic communications (mobile phones, computers, face book) 42.8 % of the families, at least one parent advise very frequently. According to the children 59% of the parents discuss related to the cultural values and 78% encourage the children to involve in the religious activities. Similar findings like current study were derived in a study (UNICEF 2004) in Sri Lanka in which 54.6% of youth from Jaffna district felt that the families were intimate and close to them and 60.5% reported as they considered family as a refuge for a problem. Further, 33.5% of them thought that they could depend on their families and 47.4% admitted that they like to spend time with families. The study further demonstrated that 4% of adolescents reported serious problems with their families. Further, 28.8% reported that parents support their decisions and 37.5% likes to share their personal matters with parents, among them 32.8% with mothers. Findings from Lukumar (2006) also were similar in which 60.6% of adolescents reported that their parents support for their educational decisions.

The results revealed that less than one fifth of the parents advise very frequently regarding substance use (11.7%) and majority (70.1%) didn't advise at all or advise rarely. Either of the parents advises about physical changes during adolescence for 16.3% of adolescents and about sexual and reproductive health during adolescence for 16.5% and more than 60% of

adolescents didn't get any advice on these issues from at least one of their parents. Further, the current study revealed that only 16.5% of adolescents were advised frequently about child abuse by at least one of their parents and 60.8 % of the adolescents were not advised at all or advised rarely. Regarding electronic communications (mobile phones, computers, face book) 42.8 % of the families at least one parent advise very frequently. According to the children 59% of the parents discuss related to the cultural values and 78% encourage the children to involve in the religious activities.

Findings from the current study regarding the reproductive and sexual education is consistent with the findings by UNICEF (2004) in which nearly 70% of 10-13 year olds were not aware of the physiological changes taking place in their bodies during this period and less than 25% of 14-19 year olds could answer correctly for the questions on possibilities and risks of conception. The findings in the study by UNICEF (2004) further revealed that more than quarter of early adolescents was aware of sexual abuse. The study further found out that about 10% of early adolescents and 14 % of mid and late adolescents in school, admitted to have been sexually abused sometime in their lives.

Among the families, in 29.6% of families either of the parents verbally abuses the child and 72.4 % punishes them physically. Nearly one fourth (25.8%) of the children reported that they were embarrassed by their parents in public and nearly half (48.2%) reported that either of the parents compared them with others. Nearly one fourth of the children reported that either of the parents expects too much from them (25.1%) and didn't respect their feelings (27.2%). Similar findings were received by Lukumar (2006) who found 77.2% of adolescents were physically punished and 34.6% were verbally abused. But corporal punishments by parents among children of 12 year old school going adolescents (Zoysa 2004), was 15% in Gampaha district. The difference clearly shows the difference, in the acceptability of physical punishments by culture. Regarding this aspect, it is good to remember the research about Jaffna culture by Sivarajah (1998). He mentioned in his study that the strict control is practised by the parents of Jaffna and the children are expected to obey whatever the parents wish. The FGDs by the

author in the current study also revealed the same in which the children showed a positive attitude towards being punished by the parents.

The parenting quality was found significantly associated with the educational level and occupation of parents, family income, and substance use by father, and Intimate Partner Violence. The 'connection' dimension of parenting was significantly associated with the educational level and occupation of parents, family income and the age of the child. The 'control' dimension of parenting was significantly associated with the educational level and the occupation of parents, substance use by father, Intimate Partner Violence and sex of the child

The 'respect' dimension of parenting was significantly associated with the educational level and occupation of parents, substance use by father, Intimate Partner Violence, family income and sex of the child

The FGDs with parents revealed that due to foreign money from the relatives who visit Jaffna after the war period, the adolescents' taste is changed. According to the parents and the key informants the priority towards the education is diverted towards the things for entertainment like hand phones, computers, motorbikes etc. They further mentioned that while some children are able to get foreign money from their relatives some others have no access as such. The children, who have no access for these things, tend to select wrong ways to get those items. The parents and experts feel that sudden entry of these sophisticated life style after a restricted life during war period also, a reason for the adolescent issues. Even though the fear of parents that the adolescents may join the militant groups (Lukumar 2006) is not there at present, still some parents are not daring enough to control the children. In an IDI, a school principal said that some parents secretly ask the principal and teachers to control their children as they are afraid to control because of the fear that the children may leave the family. Though the parents want a well behaving child, their priority is, not to lose the child. Parents and key informants stressed the need of interventions to parents to educate to set limits while proving their affection towards the children and to respect the children's autonomy. Same time they prefer education to the children to make them understand the importance and affection of a

parent. Most of the adolescents appreciate their parents and their love towards them, in the FGDs with adolescents. Most of the adolescents accept that the physical punishments are practised by the parents to discipline them. But they were not willing to accept the verbal abuse, comparison with others and punishments in front of others

The intervention for parents has shown improvement in overall parenting and in all three dimensions.

### LIMITATIONS

The tool (PPQ) was developed for the Tamil community in Jaffna district. Therefore it cannot be used in rest of the country without validation. The design of the study was cross sectional descriptive. Therefore temporal relationship of the associated factors with parenting quality cannot be predicted. As it is a descriptive study (without comparison groups) regression analysis couldn't be done. Therefore the interpretation and conclusion of the associated factors have a limitation.

The findings cannot be generalised to the rest of the country as it was conducted in Jaffna district.

- Only the students present at the school on the day of data collection were included in the study. The absentees on the data collection were not included in the study and parenting patterns they receive may be different from those who were regularly attending the school.
- As the data was collected from the adolescents, accuracy of data related to socio economic factors can be a limitation. In addition all the associated factors cannot be asked from the children due to ethical reasons. In addition, as the parenting patterns were gathered from the children, perceptual bias has to be considered as a limitation.

### CONCLUSIONS

- The newly developed tool by the PI called Parenting Patterns Questionnaire (PPQ), can be considered as a valid and reliable measure of the parenting patterns and the parenting quality in Jaffna district.

- The overall parenting quality was found good among 23.1% of the parents in Jaffna district and it is poor among 15.1 % of the parents according to the PPQ.
- The parenting quality was found significantly associated with the educational level of the parents , occupation of parents , single parent family, family income, substance use by father, and intimate partner violence.
- The modes, duration follow up period of intervention all over the world found numerous. Variations occur from context to context. The parenting education package with components of CD, VCD, leaflet and workshop was designed with the help of literature review and the experts and the intervention was carried out by the PI. The intervention for parents has shown improvement in parenting in connection and control dimensions and in overall parenting in 3 months time.

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