The attitudes of family physicians toward a child with delayed growth and development

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Aim: The purpose of this study was to assess the attitude of family physicians toward a child with delayed growth and development. Background: Primary healthcare professionals play a key role in monitoring growth and development, the best indicator of the child’s health status. If delayed growth and development can be detected early, then it is usually possible to restore functioning. Methods: This descriptive study was performed in Samsun, Turkey, in May and June 2015. In total, 325 family physicians were included. The study consisted of two parts. In the first session of the research, the story of an 18-month-old child with delayed growth and development was presented using visual materials. An interview between the child’s mother and a member of primary healthcare staff was then enacted by two of the authors using role-playing. Subsequently, participants were given the opportunity to ask the mother and member of primary healthcare staff questions about the case. During the sessions, two observers observed the participants, took notes and compared these after the presentation. In the second part of the study, the participants were asked to complete a questionnaire consisting of three open-ended questions. Findings: When asking questions of the mother, family physicians generally used accusatory and judgmental language. One of the questions most commonly put to the mother was ‘Do you think you are a good mother?’ Family physicians were keen to provide instruction for the patient and relatives. Family physicians to a large extent thought that the problem of a child with delayed growth and development can be resolved through education. Conclusions: Family physicians’ manner of establishing relations with the patient and relatives is inappropriate. We therefore think that they should receive on-going in-service training on the subject.

Key words: developmental delay; growth delay; primary

Introduction

The most important characteristic that distinguishes children from adults is that the former are growing and developing. Growth is defined as an increase in body mass and volume, while development refers to cells and tissues acquiring biological function through structural changes (Bundak and Neyzi, 2010). The normal growth and development process is affected by genetic, environmental (nutritional) and psychosocial factors. Delayed growth and development describes a child’s inability to exhibit age- and status-appropriate dimensions and functioning (Bundak and Neyzi, 2010).

The prevalence of growth delay in pre-school children is reported at 26.7%, but this is expected to decrease to 21.8% by 2020 (de Onis et al., 2012). According to Turkish Population and Health Research (Hacettepe University Institute of Population Studies, 2013) findings, the prevalence of growth
delay in the zero to five year age group in Turkey in 2013 was 9.5%. The prevalence of developmental delay in the pediatric age group ranges between 12 and 16% (Rydz et al., 2006), while developmental delay is observed in 16% of children under five years in Turkey (Kapci et al., 2010).

In Turkey, primary health services capable of diagnosis, treatment and rehabilitation are provided by family health centers (FHCs), family physicians (FPs) and primary healthcare staff (midwives/nurses) (FHS). The only widespread institution in regular contact with mother and child in Turkey between the ages of zero and six years, a time of rapid growth, is the family health system. These practitioners therefore play a key role in observing children’s growth and development (Sices et al., 2003). If delayed growth and development can be detected early, and if the child has no ‘developmental condition where functioning cannot be fully restored,’ it is possible to maximize the child’s potential (Bundak and Neyzi, 2010). For that reason, every examination at the primary level is an opportunity for early detection and intervention (Mackrides and Ryherd, 2011). Monitoring of pregnant women, babies and children is usually performed at FHCs.

However, insufficient data are available concerning how FPs will behave in the face of a child with growth and development retardation, how they monitor such cases and how they will establish communication with the family.

The purpose of this study was to assess the attitudes of FPs to a child with delayed growth and development.

Materials and methods

This descriptive study was performed in Samsun, Turkey, between 10 May and 15 June 2015, following receipt of all the requisite permissions. In total, 360 FPs were working in the province of Samsun at this time. All FPs working in Samsun were invited to participate through a written document setting out the study scope and aims. The letter of invitation informed physicians where they needed to be at and at what time. The study was performed with 325 (90.3%) participants who responded positively and attended on the day and time specified. The researchers gave the participants detailed information about the study’s aim and method. Physicians’ questions regarding the study were answered. Participants’ verbal agreement to take part in the study by asking them individually whether or not they wished to participate. No subjects refused to take part. This study was conducted in parallel with an in-service training for FPs by the public health directorate. For this reason, the participation rate of FPs was high.

Of the FPs attending the study, 65.9% were men and 83.1% were married. Mean age was 43.3 ± 6.5 years. No statistical difference was observed between participating and non-participating FPs socio-demographic characteristics.

The study sessions took place with groups of 8–10 members in 37 separate groups. Systematic sampling was used to constitute the groups. The subjects were divided into small groups to allow each participant to express himself/herself and to permit easy observation of participants.

The study consisted of two parts. In the first session, the story of an 18-month-old child with delayed growth and development, based on a genuine case, was presented by the session manager (Knali Ò.) using visual materials. An interview between the child’s mother and a member of FHS was then enacted by two of the authors using ‘role-playing.’ Subsequently, participants were given the opportunity to ask the mother and member of FHS questions about the case. FPs were able to ask the mother or the health worker as many questions as they wished. The supervisor observed and managed the question and answer process. This part of the session lasted ~40 min. All participants were given the opportunity to speak by the session manager.

The patient history described was one used in the Child Psychosocial Development Support (CPDS) program prepared for first-step health workers by the Turkish Ministry of Health. The patient history was inspired by a genuine case and was structured and standardized by Ministry of Health specialists for the training of primary health workers. The authors made no change to the history. The CPDS program is a structured, training program involving educational seminars prepared by the Ministry of Health and provided since 2005. The program is intended to support child development during pregnancy and the first six years of life, when growth is most rapid, by integrating supportive methods with primary health services. It also aims to identify risk factors that may compromise development and to
intervene at an early stage. Training sessions provided within the CPDS program instruct primary health workers how to monitor child growth and development and how to intervene in the event of problems. A training session lasts a full day.

In this part of the study, the participants were observed by two monitors (authors), who took notes and collected those notes together following the presentation. All researchers met together to evaluate the participants following each session.

**Case history**

Sedat is 18 months old and the Altaş family’s second child. The parents have been married for six years. His mother and father are university graduates who work in the private sector. They have health insurance and no economic problems. Sedat’s birth was planned and he was a wanted child. Sedat’s older sister is five years old. She attends kindergarten and has no disease. His maternal grandmother has developmental hip dysplasia. Sedat is brought to the FHC for booster vaccinations. He received only mother’s milk in the first six months. He then continued with pre-prepared soups and yoghurts. The mother says, ‘Since our financial position is good I am able to give my child the best, ready-prepared form of everything, yet it still seems that Sedat is not gaining weight.’ Sedat was born weighing 3200 g. At subsequent measurements at the FHC, weight was 8000 g at the 6th month, 8100 g at the 9th month, 8000 g at the 12th month and 8500 g at 18 months. The family brought Sedat to regular monitoring sessions. Vaccinations were complete. Sedat was monitored by a podiatrist for the first six months. Since both mother and father worked, they were unable to devote sufficient time to their children. Sedat has many toys, and is always playing with them. Indeed, he even goes to sleep with them. According to the mother, Sedat is a little lazy. He has to date made no attempt to walk. He is unwilling to stand even with support, and immediately wants to sit down again. His carer once said, ‘I think Sedat’s feet may be a bit short,’ but his mother disagreed. Sedat’s body temperature was 38° during taking of anamnesis.

**FHS: mother interview**

At interview, the mother exhibits a sad, depressed facial expression, distraction, movements expressive of troubles and aggressive behavior. She reports appetite and sleep problems. A picture indicative of depressive mood emerges.

**Information received from healthcare staff and the mother**

The history provided no anthropometric measurements other than Sedat’s weight. However, in the event that FPs asked healthcare staff or the mother, detailed information was provided to the effect that he exhibited normal development up to six months, that supplementary foods were given after six months, that his development subsequently appeared to be interrupted and that anthropometric measurements are currently below the 3rd percentile.

In the second part of the study, the participants were asked to complete a questionnaire consisting of three open-ended questions. They completed this in ~20 min.

**Questions**

1. **What are the positive aspects in the life of the child whose history is described?**
2. **What are the negative aspects in the life of the child whose history is described?**
3. **What would you do if the child were your patient? How would you act?**

The first two questions were intended to elicit those positive or negative factors in the life of a child with growth and development retardation to which FPs attached most importance. The third question was intended to determine the path that FPs would follow in monitoring a child with growth and developmental retardation.

The results were analyzed both quantitatively and qualitatively. Observation notes were evaluated by all the authors, both after each session and at the conclusion of the study. Participants’ responses to the survey questions were grouped and expressed as percentages.

**Results**

In presenting questions to the mother, FPs generally employed accusatory and judgmental language. One of the most common questions put by participants to the mother was, ‘Do you think you are a good mother?’ No participant addressed the mother by name when asking questions. Almost all participants investigated the carer’s history at great length. However, only 40.5% of participants inquired into the child’s parentage. Female participants in particular inquired into the
mother’s long working hours and accused her of lacking in self-sacrifice.

Statements by FPs regarding the positive and negative aspects of the life of the child described in the story are shown in Table 1.

Table 1 Positive and negative aspects of the life of the child in the story

<table>
<thead>
<tr>
<th>No.</th>
<th>Negative aspects</th>
<th>Percentage</th>
<th>Positive aspects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health professionals neglect/inadequacy/lack of interest</td>
<td>100.0</td>
<td>Good family economic status</td>
<td>100.0</td>
</tr>
<tr>
<td>2</td>
<td>Parent not showing sufficient interest in the child</td>
<td>94.6</td>
<td>The child having good relations with an older sister</td>
<td>86.5</td>
</tr>
<tr>
<td>3</td>
<td>Incorrect nutrition</td>
<td>94.6</td>
<td>Having a carer/the carer being experienced</td>
<td>75.7</td>
</tr>
<tr>
<td>4</td>
<td>The mother having psychological problems</td>
<td>91.9</td>
<td>Being breastfed for six months</td>
<td>67.6</td>
</tr>
<tr>
<td>5</td>
<td>The mother being deaf to warnings</td>
<td>62.2</td>
<td>Vaccinations all being complete</td>
<td>62.2</td>
</tr>
<tr>
<td>6</td>
<td>Deficient/inadequate/fragmented communication within the family</td>
<td>62.2</td>
<td>Both parents being alive</td>
<td>59.5</td>
</tr>
<tr>
<td>7</td>
<td>The child being underweight</td>
<td>62.2</td>
<td>The family being well educated</td>
<td>51.4</td>
</tr>
<tr>
<td>8</td>
<td>The mother’s long working hours</td>
<td>54.1</td>
<td>Monitoring being complete</td>
<td>51.4</td>
</tr>
<tr>
<td>9</td>
<td>The child’s inability to walk</td>
<td>40.5</td>
<td>Having toys</td>
<td>45.9</td>
</tr>
<tr>
<td>10</td>
<td>The child not being socialized</td>
<td>32.4</td>
<td>The parents being together as a couple</td>
<td>40.5</td>
</tr>
<tr>
<td>11</td>
<td>The father’s lack of interest in the family</td>
<td>29.7</td>
<td>Being a wanted baby</td>
<td>37.8</td>
</tr>
<tr>
<td>12</td>
<td>Inadequacy on the part of the carer</td>
<td>24.3</td>
<td>Inadequate nutrition being realized at the age of 18 months</td>
<td>24.3</td>
</tr>
<tr>
<td>13</td>
<td>Developmental delay</td>
<td>24.3</td>
<td>Absence of abuse</td>
<td>16.2</td>
</tr>
<tr>
<td>14</td>
<td>The mother stopping breastfeeding early</td>
<td>21.6</td>
<td>Having social security</td>
<td>16.2</td>
</tr>
<tr>
<td>15</td>
<td>The father’s long working hours</td>
<td>16.2</td>
<td>The home being of a good physical standard</td>
<td>16.2</td>
</tr>
<tr>
<td>16</td>
<td>The absence of any relatives nearby</td>
<td>16.2</td>
<td>Use of family planning</td>
<td>8.1</td>
</tr>
<tr>
<td>17</td>
<td>A loveless family environment</td>
<td>16.2</td>
<td>The child being happy in his own world</td>
<td>8.1</td>
</tr>
<tr>
<td>18</td>
<td>The child having psychological problems</td>
<td>13.5</td>
<td>No sleep problems</td>
<td>8.1</td>
</tr>
<tr>
<td>19</td>
<td>Lack of physical activity</td>
<td>13.5</td>
<td>The mother being honest</td>
<td>5.4</td>
</tr>
<tr>
<td>20</td>
<td>The father having psychological problems</td>
<td>8.1</td>
<td>The family showing interest, albeit not very much</td>
<td>5.4</td>
</tr>
<tr>
<td>21</td>
<td>Others (14 different suggestions)</td>
<td>8.1–2.7</td>
<td>Others (four different suggestions)</td>
<td>5.4–2.7</td>
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The opinions of FPs regarding what they would do with the child described in the story are given in Table 2.

Of the participants, 94.6% stated they would give the family instruction on child nutrition, 70.3% said they would offer instruction on child development and upbringing, 40.5% said they would give the carer instruction regarding child nutrition and 13.5% said they would provide instruction on intra-familial communications. They also thought that the problem of a child with delayed growth and development could largely be overcome through education.

The mother in the interview exhibits a history of depression. Participants cited the mother’s psychological problems as one of the negative aspects of the child’s life. However, while 24.3% of the participants said they would give the mother treatment for depression, 75.5% said they would refer her to a psychiatrist. Physicians preferred to refer the mother without providing psychiatric treatment and monitoring.
Again, 67.6% of the participants said they would refer the child to an orthopedist, 16.2% to a pediatrician and 8.1% to a psychiatrist. Furthermore, 40.5% of the participants advised the mother to stop working, while 29.7% advised her to reduce her working hours. No mention is made in the story of the father’s working hours. However, 5.4% of the participants suggested that the father should take more interest in the child, while no assessment was made of his working hours.

No statistically significant difference was observed in FPs’ attitudes in terms of age, sex and marital status, length of time in the profession or having children of their own.

**Discussion**

The Turkish Ministry of Health announced how the monitoring of babies and children should be carried out in the Baby and Child Monitoring Protocol (BCMP) (The Ministry of Health of Turkey, 2015a). Under that protocol, at 18 months a child should be given a complete system examination. The presence of any innate anomaly should be investigated at physical examination, and the child should be evaluated in terms of developmental hip dysplasia. Child abuse or neglect should be investigated. The child’s growth and development should be assessed and the family should be given instruction when appropriate. In addition, health professionals are advised to build communication with mother and child while performing these procedures. The BMCP is still applied in Turkey. Local Ministry of Health officials regularly monitor whether or not health workers apply the protocol in a working environment.

Primary healthcare professionals are better placed than any other occupational group in terms of frequency of contact with individuals in society.
Individuals in Turkey present to primary health institutions a mean 2.9 times a year (The Ministry of Health of Turkey, 2015b). Meetings between health professionals and patients represent the first and most important step in understanding the patient, in being able to provide appropriate treatment and in ensuring patient compliance with that treatment and that the patient persists. From the patient perspective it enables them to develop trust in the health worker, to benefit from the treatment provided and to recover from the condition concerned. The relationship between health professionals and patients must therefore be based on empathy, patience and understanding (Kutlu et al., 2010).

One piece of research performed at the beginning of the 1970s led to health professional–patient relations being considered under a new dimension. Polyclinic records of ~800 mothers presenting to a hospital pediatrician were recorded on video, and the mothers were then administered a questionnaire. Examination revealed that the mothers were frequently interrupted, that a judgmental tone predominated and that basic approaches that can have a positive effect on communication, such as greeting, shaking hands and speaking in a friendly manner, did not take place (Korsch and Negrete, 1972).

The attitude toward the mother (in the role play) displayed by the FPs in this study was similar to that of health professionals ~40 years ago.

Various types of relationship are described in patient–physician relations (Szasz and Hollender, 1956; Lussier and Richard, 2008). ‘The model of mutual participation’ that shapes this relationship is the recommended form in physician–patient relations. This relationship form is of even greater importance in the event of health problems requiring patients to change their life styles or behavior (Szasz and Hollender, 1956; Lussier and Richard, 2008).

This study is important in terms of showing that FPs did not establish a relationship based on ‘the model of mutual participation’ and tended instead to construct one based on ‘the model of activity–passivity.’

One of the main limitations of this study is that FPs were not observed in a natural environment. This may have affected the study outcomes. Physicians might have behaved differently in establishing relations with their own patients.

Future studies in which FPs are observed in natural environments will therefore be useful.

In Turkey, physician–patient relations are perhaps the most discussed issue during medical training, and the subject of the most intensive advice, but one with no regular, consistent and applied training program (Atilla et al., 2012). We therefore think that, no matter what the result, first-step health workers should be given continuous in-service training on the subject of relations and communication with patients and families.

When healthcare personnel encounter a child with delayed growth or development, they first need to establish whether this retardation is related to any organic cause. Taking a good history, complete physical examination and various basic laboratory tests are essential components of this. The better the history taken from the family, the fewer examinations that will be required. Once the reason for the retardation has been established, monitoring must be stepped up and procedures aimed at the child and family must be instituted.

The purpose of this study was to determine the path that FPs would adopt when faced by a child with delayed growth and development. Eight actions or statements were cited by more than half of FPs (Table 2). When faced by such a child, FPs stated they would give the family instruction on child development and nutrition, would request biochemical tests for the child, would step up their monitoring of the child and would give the family a feeding program. These measures are basic ones required for a child with delayed growth and development to be restored to good health. It is unclear to what extent these measures can be adopted and reflected in practice, but they are still important in showing correct knowledge of what needs to be done. However, only 13.5% said they would ‘give Sedat a general physical examination.’ This suggests that FPs are not sufficiently aware that a full physical examination is the first procedure required in the identification of the cause of delayed growth and development. In addition, FPs appeared to have problems evaluating the details set out in Sedat’s history.

Although this is set out in the BCMP, it only occurred to 16.2% of the participants that the child might have been abused/neglected. One in three children with developmental delay are reported to be abused, and even children with a single finding

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of abuse/neglect may be developmentally retarded (Koç et al., 2014). If a child is observed to lose or fail to gain weight at routine checks, and in the absence of any underlying reason to account for this, then the possibility of child abuse/neglect must be considered. In the light of these data, we think that FPs in Turkey need to attend regular and effective programs in order to improve their sensitivity on this subject.

In this study, FPs stated that they could provide the family with education on various subjects. In addition to showing that FPs are eager to provide instruction, this is also an indication of their belief that education can be effective in solving problems in a child with delayed growth and development.

FPs recommended that the mother should either reduce her working hours or stop working altogether. No suggestion was made regarding the father’s working hours. We think that this may reflect a prejudice to the effect that child development is more the responsibility of the mother.

Depression, particularly in the pre- and postnatal period, is a widespread disease among women of child-bearing age and one involving high financial costs (Gjerdingen and Yawn, 2007; Shrivastava et al., 2015). Maternal depression is reported to affect the quality of child care and to represent a risk to its social, behavioral, cognitive and physical development (Figueroa-Leigh et al. 2015). The mother described in the story exhibits a picture of depression. Participants noted that the mother was depressed, but instead of initiating treatment they largely preferred referral to a psychiatrist. This should be attributed to FPs being generally reluctant to arrange treatment for psychiatric diseases. Studies show that psychiatric diseases are treated more on a secondary than a primary basis (Kessler, 2012). FPs reluctance to arrange treatment for psychiatric patients may be due to excessive workload or to lack of confidence on the subject. Studies have reported that providing training sessions for FPs on the subject will increase their willingness to treat psychiatric patients (Keeley et al., 2014). We therefore think that FPs’ responsibilities regarding psychiatric diseases need to be increased through supportive training sessions and that measures should be taken to support such physicians within the health system.

In conclusion, this research showed that FPs manner of establishing relations with patients and their families is inappropriate, but that they are nevertheless very willing to provide health instruction. We think that FPs should be given continuous in-service training on the subject of relations with patients and families.

Limitations

Limitations of this study are that FPs were not observed in a natural environment and that it was thus impossible to determine the effect of group psychology on the results.

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Conflicts of Interest

No conflicts of interest was declared by the authors.

Informed Consent

Oral informed consent was taken from participants in this study.

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