

REVIEW PAPER**Mental Retardation and Parenting Stress****Savvas Karasavvidis, BSc(N), BSc(Psy), BEd(c), MEd, MSc(Psy), MSc (c), RN**

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Abstract**Background:** The presence, upbringing and looking after of a mentally retarded child in the family, can become a threat to the mental health of its parents and is the main predisposing factor of stress for the parents.**Aim:** The purpose of this systematic review is (a) to document the contemporary research bibliography related to the stress of parents with mentally retarded children, (b) to aggregate the factors and secondary parameters based on the contemporary research related to the influence of the (child's) mental retardation on the parents and (c) to show an intercultural aspect regarding the presence of stress to parents with mentally retarded children.**Methods:** Systematic review of research articles published in scientific journals included in the international academic databases HEAL-LING, SAGE, ELSEVIER, WILSON, SCIEDIRECT, MEDLINE, PUBMED, PsycINFO, Cochrane, EMBASE, SCIRUS and CINAHL having as search criteria and key words the terms («parental stress and mental retardation» [MeSH], «parenting stress and persons with special needs» [MeSH], «mental retardation and family problems» [MeSH], «stress and parents» [MeSH], «parenting and stress» [MeSH], «mental delay and parents» [MeSH], «developmental disabilities and family stress» [MeSH], «intellectual handicap and parenting» [MeSH], «maternal stress and child with disabilities» [MeSH]).**Discussion:** The review has proven that all forms of mental retardation have an important -from a statistic point of view- impact on the parents' mental health. Anxiety, stress and depression are common symptoms mentioned by the parents. Additionally, there are individual variables such as the husband-wife relationship, the parents' approach to their child's disability, the parental strategies used in order to cope with the daily life of the child's disability and the behavioural problems of their child, all of which contribute to the increase of the level of parental stress.**Conclusion:** Finally, this review indicates that there is a same level of seriousness of the symptoms and impact of the disability on the parents in counties with different cultures (West – East). However, at the same time, there is a different approach in terms of social support provided to the parents and their everyday stress.**Key-Words:** Developmental disability, intellectual problems, mental delay, mental retardation, parenting stress, special needs.

Introduction

The phrase «mental retardation» or similar phrases concerning mental delay may be the only expression in all the languages of the whole world that is causing so much anxiety, stress, disorder, fear, athymia and stigma, mainly in the Western Societies. We are living in a world that promotes perfection. In such living conditions, the sense of difference is very close to the sense of divergence and, as a result, mental retardation becomes a synonym to threat to the self-image of the contemporary intellectual and independent person.

The Mental Retardation is concerning 2-3% of the population, if it is determined by the Intelligence Quotient (IQ<70) (WHO, 1993) and as far as the forms of Severe Mental Retardation are concerned (IQ<50) the estimation covers 0.3-0.4% of the general population. (Scott, 1994). According to the World Health Organization and the American Association on Intellectual and Developmental Disabilities, Intellectual Disability is a condition of arrested or incomplete development of the mind characterized by impairment of skills and overall intelligence in areas such as cognition, language, and motor and social abilities.

The mental retardation is characterized as severe and chronic disability (McDonald et al., 1992). The substantial and basic cognitive functioning is causing impairments to life activities (Baroff, 1991). It is diffused either in the area of cognition or physically or both. It is characterized by significant impairments of cognitive functioning and it co-exists with limitations in adaptability (Luckasson et al., 1992). Learning difficulties, spina bifida, hyperactivity, attention deficit disorder, cerebral palsy, autism, seeing and hearing problems and other syndromes are included in the same category of developmental and intellectual disorders (McDonald et al., 1992). Mentally retarded children are able to develop and progress with various educational and therapeutical models.

Having a child with a chronic disease or disability means that the family dysfunctions or deviates from the normal family standard that one has in mind. The chronic disability causes chain reactions to the family structure. As a result, the family suffers a crisis. This crisis has two forms: tragical, on the one hand, because it is concluded under the burden of the final diagnosis and organizational, on the other hand, because it requires a re-determination of the roles in the

family (Farber, 1959,1960). Apart from this crisis, there are also disorders in the family cohesion, emotional effects on the family members, changes in social life and social roles, the mother abandoning her work and less free time for all family members (Drotar, 1981, Wong, 1993)

The everyday life must respect the demands for coping with the disability, the roles must be re-determined and the rules must be re-adjusted (Reiss et al, 1993). The everyday care, instead of being a normal part of the everyday life of a family with a little child, has a completely different dimension when the child is mentally retarded with a long term dependency impact on its care. Therefore, one of the basic challenges for parents is to manage the child's chronic health problems effectively and to cope with them while playing this role together with all the other demands of everyday life (Marvin and Pianta, 1996, Turnbull and Turnbull, 1990, Waggoner and Wilgosh, 1990).

The increasing interest of researchers and scientists in the field of developmental and family psychology indicates that intellectual disability and mental retardation, as a symptom and as an element, causes great changes in the life and role of parents who are taking care of a mentally retarded child. Up to this point, there are important studies showing that parents taking care of a mentally retarded child have significant stress levels.

The definition of stress is the individual answer to the facts that modify our social environment (Rabkin and Struening, 1976). Stress is experienced when our subjective demands of a situation are incompatible with the ability of meeting and adapting to these demands (Straus and Kantor, 1987). Moreover, stress can be defined as the balance between the external environmental demands and the internal perception of the ability to adapt or even respond when the demands impair the achievement of other important matters of survival (Raina et al., 2005).

The relationship between the parents and the mentally retarded child is described in the above mentioned framework. The everyday stressing experiences seem to have an impact and influence the parenting psychological functioning, the behaviour of the parents and the mentally retarded child's reactions. From a more interactive perspective, it seems that the parents' stress is coming from their inability to adapt to the everyday care demands of their child. This fact through the uncertain course of time and the

unpromising future becomes the reason why the parents have the sense of losing control of the situation and why they suffer from such a great stress.

It is generally accepted that a mentally retarded child has significant needs which require time and energy, participation in activities of everyday care which further demand physical strength; they are unpleasant and often modify the family flow and activities (Seltzer and Heller, 1997, Shultz and Quittner, 1998). The relationship between the child's difficulties and the family's perspective seems to influence the family's social ecology (the couple's quality of life, the parenting stress and the social support) and is depending on the seriousness of the disability.

The researchers have found out that these parents are in danger of having several problems in their family life as well as emotional difficulties (Beckman, 1991, Dumas et al., 1991, Hanson et al., 1989, Singer and Irvin, 1989). The parents' stress is determining because it influences their parenting practices as it is characterizing them as malfunctioning (Boyd, 2002). This way the high level of stress is related to the approach that the parents have as far as the functioning of their family is concerned and the perception of themselves and their spouses (Davermanesh, 1997, Ong et al., 2005).

The interaction between the child and the family creates negative dynamics and causes stress and reactions to the disabled child (Brinker et al., 1994, Llewellyn et al., 2005, O'Connor, 2002). Today, the research is examining the parameters that have an impact on the creation of stress. In this field, it is concluded that the factors playing an important role are the diagnosis of the child's disability, the seriousness of the child's disability, the child's behaviour, the sources of support that the family has and the quality of the husband-wife relationship (Dumas et al., 1991, Gupta, 2007, Kwon, 2007, Weiss, 2002). Moreover, other parameters such as the socio-economic level of the parents, seem to contribute to the creation of stress (Emerson et al., 2006) and the methods and strategies that parents use to take care of their children (O'Neil et al., 2001, van et al., 2004) as well as the kind of professional help they are receiving, are all related to the parents experiencing stress (Mahoney and Bella, 1998).

In comparison with the parents with normal children, parents with mentally retarded children experience more stress (Quine and Paul, 1985, Roach et al., 1999, Valentine et al., 1998). Finally, the gender of the child and the reduced

communication skills, the burden of everyday care, the problems of behaviour, adaptability and maladjustment, the temperament, the response and the repetition of a behaviour, the way parents cope with the everyday problems of their child on a daily basis, the quality of the social network, the satisfaction of the couple and the tendency to depression are the main elements of the relationship between the child's mental retardation and the parental stress. (Frey et al., 1989, Shulman et al., 1990, Quine and Pahl, 1985, Beckman, 1983, Friedrich, 1979, Belsky, 1984, Friedrich et al., 1985, Dykens, 2000).

This Systematic Review aims to inquire the relationship between parenting and the forms of mental retardation. More specifically, through the systematic examination of the current research bibliography in the English language during the last fifteen years there will be an effort to examine the following statistical hypothesis: (a) How any kind of mental retardation of a child is affecting the experience of emotions of anxiety and stress of the parents, (b) Which secondary parameters or characteristics of the mentally retarded child's behaviour are more related to the parental stress and (c) What are the information from an cross-cultural point of view (East -West) regarding the relationship between the parental stress and the mental retardation of the child.

Methodology

The method of research of electronic databases on the internet has been used. There has been an extended research in articles published in scientific journals included in the international academic databases HEAL-LING, SAGE, ELSEVIER, WILSON, SCIENCEDIRECT, MEDLINE, PUBMED, Cochrane, EMBASE, SCIRUS and CINAHL having as search criteria and key words the terms («parental stress and mental retardation» [MeSH], «parenting stress and persons with special needs» [MeSH], «mental retardation and family problems» [MeSH], «stress and parents» [MeSH], «parenting and stress» [MeSH], «mental delay and parents» [MeSH], «developmental disabilities and family stress» [MeSH], «intellectual handicap and parenting» [MeSH], «maternal stress and child with disabilities» [MeSH]) as well as combinations of the above.

Furthermore, there has been research in the relevant information in articles from books, records and summaries of congresses, handbooks, educational programmes and therapeutical models

and all the references have been studied in depth. In addition, there has been research using the names of the most popular authors in the bibliography. Moreover, all the bibliographic references fulfilling the choice criteria of the systematic review have been studied.

Finally, there has been research in the special databases of the Doctoral Thesis Library of the Aristotle University of Thessaloniki, the Databases of the Department of Social and Economic Sciences of the University of Macedonia and the Library of the University of Ioannina.

The documentation of the data has been made on the basis of a table of data-input including:

- The name of the first author of the study and the country of origin
- The key words of the research
- The publishing journal as well as the date of publication
- The aim of the research and the variables
- The measurements used (questionnaires, interviews)
- The sample, its characteristics and the method of choice of the sample
- The research methodology related to the management of the conditions during the completion of the questionnaires.
- The Data Analysis Method (Qualitative, Quantitative, Combined, Comparative)
- The main results
- The secondary parameters of the variables.

Moreover, there were inclusion and exclusion criteria of the evaluated researches.

For the inclusion criteria the following were applied:

- The study should relate the parental stress to the mental retardation.
- The study should be original.
- The study should take into consideration all forms of mental retardation, including the combined form (mental and kinetic) or also the examination of many forms of mental retardation in the same sample at the same time.
- The study should have clear results regarding the parental stress.
- The study should provide with accuracy the statistical relationship between the parental stress and the mental retardation
- The variable of stress should regard either the father or the mother or even both.
- The variable of the mental retardation should have as parameter the actual age of the child (from infancy to adulthood).

- The study should come from any country of the world in order to examine the intercultural element.

As far as the exclusion criteria are concerned:

-The Chronological Limitation of Fifteen Years (1994-2009) in order to take into consideration the most recent and up-dated studies in this scientific field.

-The Language Limitation in the English Language because of the researcher's ability to study in this language.

-The Sampling Limitation. The Quantitative Studies should include a sample of more than 25 participants and the Qualitative more than 6.

Results

Studies fulfilling the above mentioned criteria and showing the statistical relationship between mental retardation and parental stress have been included in the present review.

This Systematic Review is based on the research study of the results of 26 published research articles (on line availability) which have been selected from a total of 76 available published scientific articles concerning research, educational and therapeutical programmes, articles from books, therapeutical models, congress announcements and records related to the above mentioned criteria.

More specifically, out of the resources that came up after an extended research on the Internet, those that were general reviews or were related to case studies and those that were researches conducted from the same researcher concerning previous studies using the same research methodology, but using a greater sample in order to compare the results with the original research, they have all been excluded from the present study. Furthermore, studies in the form of summary, parts of a book's or handbook's chapter or article concerning the presence of a therapeutical programme or a technique such as rational-emotional therapy or learning skills when related to the reduction of the stress levels of parents with mentally retarded children, they have all been excluded from this study.

Moreover, one of the exclusion criteria has been the fact as whether the studies were examining - apart from stress- other variables such as the sense of psychological burden, the stress proliferation, the predisposition for suffering anxiety disorder, the comparison of several forms of mental retardation with other diseases (asthma, loss of hearing, Imperforate Anus, AIDS-HIV), as

well as those focusing on the relationship between mother and child and not focusing on the relationship between maternal stress and mental retardation. In addition, those studies that were not based on specific causes of the mental retardation, those comparing the husband-wife relationship in relation to the disability while the parents were already in stress and those focusing on the way of bringing up and educating children or the strategies used by the parents to cope with the demands of their mentally retarded child, these were all contra-indications for being included in this systematic review.

These 26 studies were published during the period from 1994 until today-2009 and they are coming from 17 different countries. More specifically, from the United States of America (9 studies), Australia (2 studies), Germany (2 studies), United Kingdom (2 studies), United Arab Emirates (1 study), Japan (1 study), Iran (1 study), Israel (1 study), Canada (1 study), Lebanon (1 study), Bangladesh (1 study), Netherlands (1 study), Sweden (1 study), Turkey (1 study) and a combined triad, Jordan, Taiwan and North Ireland (1 study). This marquetry of 5 continents is quite impressive. Africa is not being represented.

Research Analysis

The various studies from different parts of the world are further highlighting the relationship between parental stress and mental retardation. Using search filters such as the criteria and the limitations set forth above, the present systematic review is organized in a form that took into consideration mainly the factors and variables which are common in most research results from the studies regarding this particular subject.

On the grounds of the common results, the present systematic review has concluded that the variables in the relationship between parental stress and mental retardation can be categorized in the following four basic groups.

1. Information about the child itself
2. Characteristics of the parents
3. Family ecology
4. Social Environment – Cross-cultural condition.

In the categorized group of variables concerning the information about the disabled child itself, a statistically significant relationship between the behavioural problems of the child and the parental stress is concluded. The majority of the researches (Kobe and Hammer, 1994, Hodapp et al., 1997, Mobarak et al., 2000, von Gontard et al., 2002, Hastings et al., 2005, Raina et al., 2005, Khamis,

2006, Bourke et al., 2008, Plant and Sanders, 2007, Gallagher et al., 2008, McConkey et al., 2008, Mori et al., 2009, Estes et al., 2009) point out that the behavioural problems of the disabled children have a direct effect on the creation of parental stress.

Secondary parameters of this problematic behaviour can not be pre-determined especially through the planning of the research, but these parameters result from the secondary analysis of the use of measurements (Questionnaire, Interview and Self-reports). Consequently, the parents understand as problematic a behaviour that is expressed with emotions such as the negative self- and body image that their child have (Kobe and Hammer, 1994, Sarimski, 1997), the opposing, antisocial and aggressive behaviour (Kobe and Hammer, 1994, Kasari and Sigman, 1997, Sarimski, 1997, von Gontard et al., 2002), the child's stress (Kobe and Hammer, 1994), the emotional stupor and the expression of negative feelings (Davis and Carter, 2008) as well as the lack of pleasure and pessimism (Kasari and Sigman, 1997, von Gontard et al., 2002).

As far as the child's adaptability to the mental retardation is concerned, the difficult behaviour, the excessive demands and the maladjustment of the child (Kobe and Hammer, 1994, Hodapp et al., 1997, Sarimski, 1997, Bourke et al., 2008, Estes et al., 2009, Koydemir and Tosun, 2009) seem to be the main causes of parental stress.

At the same time, coping with the everyday care of the child is a particularly stressful situation for the parent because, during this care, the child expresses several forms of difficult behaviour. As a result, it is concluded by the research that the problematic behaviour of the child also includes matters concerning the inability for the child to integrate into the family structure and routine (Kobe and Hammer, 1994), the time demanded for the everyday care of the child (Mobarak et al., 2000, Hedov et al., 2002, Hastings et al., 2005, Raina et al., 2005, Plant and Sanders, 2007, McConkey et al., 2008, Kermanshahi et al., 2008, Davis and Carter, 2008), and the hyperkinesia - hyperactivity of the child, the sleeping conditions, the night enuresis, the toilet, the hygiene and the nourishment of the child (Sarimski, 1997, Mobarak et al., 2000, Hedov et al., 2002, Khamis, 2006, Davis and Carter, 2008, Gallagher et al., 2008). Finally, in a care-after-care level, the parents are anxious about who will be responsible for taking care of their child with such a problematic behaviour, when they will be absent from home, and they report that the conditions for bringing up

a child with such a behaviour are particularly difficult (Hedov et al., 2002, Raina et al., 2005, von Gontard et al., 2002).

Over viewing the relevant with the present review researches, it can not be concluded that the general characteristics of the disabled child are part of the stressful life of the parents. This way, no particular importance is being given to the child's general characteristics. However, these specific characteristics play an important role in experiencing parental stress (Hodapp et al., 1997, Kasari and Sigman, 1997, Hastings et al., 2005, Britner et al., 2003, von Gontard et al., 2002). Therefore, there are studies that track and identify these specific characteristics.

As such specific characteristics are being reported the depression of the child (Kobe and Hammer, 1994, McConkey et al., 2008), the physical health of the child (Bourke et al., 2008), the gender of the child (Dyson, 1997), the degree of disability of the child (Khamis, 2006, Plant and Sanders, 2007, Azar and Badr, 2009) and the form, the kind of the disorder (Rimmerman and Duvdevani, 1996).

On the one hand, the combined causes of mental retardation including mental and physical disability seem to have a more important impact, but on the other hand, parents seem to be more stressed regarding the diagnosis, when the diagnosis is not clear -like in Autism- and also when the child's disorder can not be diagnosed and identified (Kasari and Sigman, 1997).

The child's age is an important factor. Parents with mentally retarded infants or young children have less stress than those parents with mentally retarded pre-school or adolescent children. This is due to the little expectations that the parents have for their young children. The demands for cognitive functioning, language skills, calculations and educational skills are dependent on the child's age (Mobarak et al., 2000, Hastings et al., 2005, Davis and Carter, 2008, Rutgers et al., 2007) and they determine the child's future perspective in attending the class at school.

In the same framework, parents are particularly anxious about the delay of acquiring social skills, the involvement of the child in the community activities, the imminent long-term dependency of the child on parental care and, of course, the uncertain independence of the child (Bourke et al., 2008, Davis and Carter, 2008, Kermanshahi et al., 2008, Mori et al., 2009).

The parents, who have already developed their personality, enter in a state of disability with their child's birth. It is normal that some characteristics

of their temperament are related to their reactions towards their child's disability and, consequently, they characterize their behaviour and form special types of coping with the care of their disabled child. As shown by the research bibliography, the sense of psychological burden and distress that the parents feel while taking care of their child, influences their behaviour and their experience of stress and depression (Mobarak et al., 2000, Hedov et al., 2002, Britner et al., 2003, Benson, 2006, Gallagher et al., 2008, Koydemir and Tosun, 2009, Mori et al., 2009).

To this is added the unique ways in which the parents are coping with the everyday life. The way that each parent copes with the disability demands and his/her personal strategies influence the relationship between stress and care (Sarimski, 1997, Dunn et al., 2001). The sense of having control of the situation (Dunn et al., 2001, Raina et al., 2005), the sense of responsibility for the child care (Plant and Sanders, 2007, Koydemir and Tosun, 2009) as well as the parent's health (Bourke et al., 2008, Azar and Badr, 2009) play a complementary role.

The way that the parents are understanding their child's disability, the opinions regarding the child's development and their perception of the disorder are also considered as characteristics of the parents.. Negative views, especially from the mothers, concepts of weakness and repulsion as well as keeping a distance are relating statistically to the experience of stress in comparison with the positive views (Dunn et al., 2001, Hastings et al., 2005, Davis and Carter, 2008, Kermanshahi et al., 2008, Koydemir and Tosun, 2009, McConkey et al., 2008).

Usually the parents of mentally retarded children are particularly anxious about the future and the perspectives of their children. This anxiety is related to the potential of their child to be independent in the future, the long term defence and protection of the child's life, their future care, and their child having a job well as their support (Hedov et al., 2002, Khamis, 2006, Kermanshahi et al., 2008, Koydemir and Tosun, 2009).

The family ecology (family relations, husband-wife relations and informal social support) is categorizing a series of variables related to the stress of parents taking care a mentally retarded child. Initially, the senses of the family functionality, the functioning of the family as a system and the cohesion as well as the resistance of the family members are statistically connected with the parental stress. It seems that the poor opinions of the parents about the functioning of

their family cause stress to themselves and influence the care practices towards their child (Dyson, 1997, Kermanshahi et al., 2008, Bourke et al., 2008, Raina et al., 2005, McConkey et al., 2008).

The quality of the husband-wife relationship, the resolution of problems in the marriage, the single parent family, the time available for the couple, the personal space and free time for the couple, the existence of positive interpersonal relations and the sense that the burden of care is shared between the father and the mother, are all variables connected with the parental stress (Hodapp et al., 1997, Britner et al., 2003, Sarimski, 1997, McConkey et al., 2008, Koydemir and Tosun, 2009).

The social environment and the social reality are considered as intermediary factors between the parental stress and the mental retardation. Basic variable seems to be the social support of the parents. The social support is distinguished in informal support, on the one hand, when provided by other members of the same family, relatives, friends, neighbours, the community, the parish and the support teams, and formal, on the other hand, when provided professionally by scientists and professionals either in private or in public specialized centres and hospitals.

Contradictory data concerning the social support have resulted from the researches studied. In some researches parents with mentally retarded children have reported that the informal social support they received is the same as the one provided to parents with normal children or that they do not give it such an importance (Dyson, 1997, Britner et al., 2003). However, other parents have reported that the informal support they received is very little and poor and that they would like to have more support in order to cope with their responsibilities (Hodapp et al., 1997, Sarimski, 1997, Dunn et al., 2001, Rutgers et al., 2007, Gallagher et al., 2008, Kermanshahi et al., 2008, McConkey et al., 2008). Furthermore, as far as the use of professional help is concerned, some researches consider it indifferent (Benson, 2006), as others consider it important to the relationship between stress and mental retardation (Hodapp et al., 1997).

Through this systematic review there were numerous cross-cultural elements, mainly comparing the confronting of the disability in the Western and the Eastern world. The studies supporting these elements are originating from the Eastern countries and they indicate some

intermediary elements in the relationship between stress and mental retardation.

As a matter of fact, a study in the United Arab Emirates showed that a significant factor of cause of the mental retardation is endogamy which also contributes indirectly to the stressful life of the parents (Plant and Sanders, 2007). Researches conducted in Jordan and Taiwan (McConkey et al., 2008) provided that parents with a mentally retarded child experience more stress when they are sharing the same house with another family, when they live in a rented and not owned house and when the mothers have a low level of education (McConkey et al., 2008).

Moreover, studies in Bangladesh, Turkey, Jordan and Taiwan showed that poverty, difficulty of access to services for special needs and economic difficulties are responsible for the experience of stress for mothers with mentally retarded children. Finally, a research in Turkey has indicated that mothers lose their jobs or are obliged to work part-time because they are the only responsible for taking care of the disabled child (McConkey et al., 2008) something that seems to be happening also in Sweden (Hedov et al., 2002) where, however, the State is responsible for the child's care and there is a significant benefits policy.

Conclusions

According to the study of the total of 26 scientific articles attempting to describe the relationship between parental stress and mental retardation of their child, there are significant results concluded regarding the secondary intermediary parameters influencing this relationship.

As the technical characteristics of this systematic review are being referred more the use of the Descriptive Statistical Methodology, as well as the use of Qualitative Method, Self reports and Interviews or even a combined form of the above. Moreover, the numerous uses of Questionnaires are quite impressive, and it is worth noticing that there has been a common use of recording measurements of the Socio-demographic Data (SES) in every single research.

As far as the representation of the researches, they cover 17 countries from all over the world. Africa and South America is not being represented.

There is an escalation regarding the publications. Since 1994 until today, that is the period covered from the present systematic review, there is an increase of studies concerning the relationship of parental stress and their child's mental

retardation. This could be justified initially because of the more and more increasing interest of the humanistic studies regarding the broader field of Mental Retardation. At the same time, though, there is a significant interest towards the parents' needs. That is, the existence of 26 studies and their escalation (merely 11 from this review have been conducted during the last three years) shows the significant interest not only in the mentally retarded child, but also in its environment as an interdependent system. Another possible explanation could be the spreading of the Internet and the publication of the researches in a way that they are available to the world's academic community and they are the basis for further research and study.

From an exploratory point of view, it can be noticed that the main variables of this statistical relation can be divided in four basic categories: (a) the behavioural elements of the child itself, (b) the parents' characteristics, (c) the family ecology and (d) the social environment and the cross-cultural conditions.

As a matter of fact, the main variable in the relationship between the mentally retarded child and the stress emotions of its parents is, indeed, the problematic behaviour. This is including not only elements of temperament (emotions, reactions, conditions and frameworks) but also elements of needs and care (everyday life, survival, up-bringing, and security).

On a secondary level, the mentally retarded child is in the core of the interaction with the stressed parent on the grounds of the future perspective of its life, the characteristics of its disability (diagnosis, identification, seriousness, chronic disease, age of appearance, symptoms and kind of disorder).

From the parents point of view, the parents as directly involved in the child care, they experience stress and depending on their personality (physical strength), their emotions and their perception system for the disability, the sense of controlling the condition of the disability, but also the unique way in which they take care of their child every day, trying to find a balance between the stress they experience and the taking care of their mentally retarded child efficiently.

For all this the existence of a support framework is very helpful, but the relationship with the husband/wife, the quality of the marriage and the functioning of the family play an even more important role.

When these fields are sub functioning and the community is unable to support the parents either

formally or informally and understand their needs, then there is a problematic image of the parents. In a cross-cultural level, the well-being of the parents is highly dependant on the access to health services, the economical status of the family and the father's job.

Discussion

The present systematic review is contributing to the following: (a) it is being established that the mental retardation is a source of parental stress all over the world and for all forms of mental retardation examined in the present systematic review, (b) the role of the child's problematic behaviour, the husband-wife relationship, the social support, the sense of psychological burden and the time needed for the child care, are set forth as secondary most important variables affecting the experience of parental stress (c) it is being proven that the emotions experienced by the parents, and especially the mothers, do not have a stable course and linear relation but they vary in terms of intensity, significance and qualitative characteristics and, finally, (d) the variables are indicated as prognostic indicators and the philosophy of prognosis and avoiding the problematic image of the parents is promoted when these variables after being identified, can have a prognostic effect regarding the prevention of the problematic image of the parents

On the grounds of all the researches, one could move a step further and doing a more qualitative analysis one could explore the predisposing factors for the creation of stress in parents taking care mentally retarded children. According to the study of Kobe and Hammer (1994) it seems that the maternal stress is increasing when a family problem co-exists and when the family members are tired and exhausted. On the other hand, the same study provides that the maternal stress is decreasing when there is a possibility of recovery, when the parents are equipped with strategies of sufficient care provision and when the child itself facilitates the situation by adapting emotionally to the disability.

Another prognostic indicator of the parental stress increase is the family's tendency to refer the mentally retarded child to institutional care (Rimmerman and Duvdevani, 1996). Furthermore, the psychological mechanisms used by the mother in order to cope with her child's disability seem to provide for the later and unavoidable stress disease. Such mechanisms are avoiding, refusing, denying, hoping in miracles,

fantasizing about normality, using substances and being distant (Hedov et al., 2002).

A series of researches concerning the decrease of stress, show that the parents and especially the mothers experience low levels of stress and they manage to reduce their depression for their mentally retarded child, when they have social support, they emphasize on the personal development of all the family members, invest in positive interpersonal relations with the members of the family, have high self perception, high skill level, self-esteem, stress management strategies, belief in God and strength from their religious believes and when the independency of the child and its participation to social activities can be carried out through just telephonic supervision (Dyson, 1997, Raina et al., 2005, Benson, 2006).

Emotions of the parents that can be predisposing factors, are pessimism, anxiety, sorrow, disappointment, depression of the husband/wife, guilt, lack of trust in the parental skills and the decision making, denial, shock, crying, pressure, stress, fear, loneliness, confusion, social isolation, negative view from people (Hodapp et al., 1997, Hastings et al., 2005, Gallagher et al., 2008, Koydemir and Tosun, 2009). The proliferated stress in other fields of human activities of the parent is also an important prognostic indicator (Benson, 2006).

At last but not least, the assessment of the stress and the depression of the child with the most appropriate measurements can contribute to the prevention of maternal stress. It is concluded that the depression of the mother, her marriage problems, the sense of being incapable in her role as a mother and the loose -if not inexistent- tight with the father, are factors affecting the psychological functioning of the child (Kobe and Hammer, 1994). Signs of depression and stress of the child are making us refer to the mother as a circular argument of a vicious circle: the child causes stress to the mother and the stressed mother causes stress to her child.

There is no doubt that using the results of this systematic review as predisposing indicators for the appearance of stress in parents taking care of mentally retarded children, is answering why these data are so useful in relation with the parents' real needs. Consequently, through these studies, it seems that the parents of such children have a difficult time and are in need of help. With the help from the research results, we can intervene.

However, the most significant help provided to them is listening to their needs. So, the parents

need support and specific practices in order to manage to defend themselves against the painful emotions of the mental retardation as well as methods for managing their views about their child's disability.

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