

Managing Parenting Stress through Life Skills Training: A Supportive Intervention for Mothers with Visually Impaired Children

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ABSTRACT

Background: Vision impairment in children is one of the most severe disabilities that cause stress in parents. Therefore, it seems necessary to establish and conduct interventions for controlling parenting stress and preventing its negative consequences. This study aimed to investigate the effect of life skills training (LST) program on parenting stress of mothers with blind children aged 7 to 12 years.

Methods: This study was a non-blinded randomized controlled trial. 52 mothers with blind children studying at Shoorideh Shirazi educational complex, Shiraz, Iran in 2013 were enrolled, using census sampling method. Balanced block randomization method was used to allocate the participants to groups. The intervention group participated in an LST program consisting of 5 two-hour sessions per week for 5 consecutive weeks but the control group didn't. Data were collected using a demographic questionnaire and Parenting Stress Index; they were completed three times by the participants of both groups before, immediately after, and one month after the intervention. Collected data were analyzed using Chi-square, independent t-test and repeated measures analysis of variances (ANOVA).

Results: The LST program could decrease parenting stress in the intervention group mothers ($P < 0/001$). This statistically significant reduction in the mean scores of parenting stress was observed in both children and parents.

Conclusion: LST program could reduce parenting stress in mothers with blind children. Therefore, it can be used as an efficient, cost-effective and simple technique for managing parenting stress in such parents.

Trial Registration Number: IRCT201405147531N6

KEYWORDS: Parenting; Stress; Training; Visually impaired

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INTRODUCTION

Blindness is one of the most prevalent disabilities worldwide which is known as one of the most severe health conditions affecting individuals, families and communities.¹ According to the latest World Health Organization (WHO) estimates in 2010, approximately 39 million people in the world were blind.² As revealed in the literature, parents of blind children experience parenting stress due to some reasons such as decreased parent-child emotional interactions and communication performance, and socially and physically developmental delays.³ Parenting stress is a psychological reaction to the demands of being a parent. Such reaction results from the parents' negative perceptions toward themselves and their children in association with their parenting responsibilities.⁴ Parents with blind children take on additional parenting responsibilities such as making attempts to enhance the children's learning about social activities, self-care, and independence. Evidently, the parents who experience stress and psychological pressure cannot fulfill their parenting roles and, eventually, may even harm the children's social, psychological and physical growth.^{5,6} Parenting stress in combination with other factors such as anger expression can lead to more serious parenting problems such as child abuse which, in its turn, would be followed by more serious consequences.⁷ Accordingly, psychological status of the parents with a blind child is found to have a profound effect on the child's life. According to surveys conducted, similar studies have not been found. Hence, conducting interventions to investigate and control parenting stress seems necessary in order to decrease such negative consequences. Furthermore, it is necessary to provide consultations and psychological training to parents to reduce parenting stress.⁸

Life skills are psychological abilities for positive and adaptive behaviors which enable the people to deal effectively with the challenges and demands of daily life.⁹

The review of the literature has shown that the child's disability is not the only factor which

harms the normal child-parent interactions. The parents' psychological issues such as stress and depression play a major role in this regard. Therefore, consultative supports and interventions are required to prevent such problems.¹⁰ Teaching stress-coping skills has also been reported to have positive effects on parenting stress of the mothers with children suffering from attention deficit hyperactivity disorder.¹¹ Likewise, life skills training has had positive effects on parenting skills and promoted developmental skills of school-aged children.⁸ Some factors such as the levels of the parents' knowledge about proper interaction skills and the amount of social support received by families have more effects on parenting stress than do aspects of child functioning. Therefore, preventing and controlling parenting stress seems crucial.¹² Since parenting stress can negatively affect the parenting quality of the parents with blind children and the formation of social behaviors in such children,¹³ this study aimed to examine the effect of an LST program, as a strategy for coping with stress, on reducing parenting stress in the parents with blind children. Therefore, the present study was designed to evaluate the efficacy of LST in parenting stress of the mothers with blind children aged 7 to 12 years. The results obtained from the current research are of great importance to consultants and health care professionals.

MATERIALS AND METHODS

This study was approved by the Ethics Committee of Shiraz University of Medical Sciences (Ethics Committee Approval Number: CT93767006). In this non-blinded randomized controlled trial, we enrolled 52 mothers with blind children aged 7 to 12 years, who were studying at Shooreideh Shirazi educational complex in the school year of 2013-14.

Inclusion criteria were willingness to participate in the study, ability to attend educational sessions and completing the questionnaire as well as residence in the city in which the study was done; while exclusion

criteria were the parents' unwillingness to continue their participation and not following the interventions, experience of participation in other LST program, consuming psychiatric medications, and absence of more than two sessions.

Since there is only one primary school for the blind and partially sighted children in Shiraz, all samples were collected using census sampling method from Shoorideh Shirazi boarding school during one month. We enrolled 92 mothers with blind children, of whom 35 who were not available and lived outside Shiraz, were excluded. Out of the 57 participants who were selected using census sampling method, 4 were excluded as they were consuming psychiatric medications under the supervision of a psychiatrist (n=5) or had an experience of participation in life skills training programs (n=1). The final 52 participants were randomly assigned into the intervention (n=26) and control (n=26) groups,

using balanced block randomization method (block size=4) (Figure 1). Data were collected from the mothers using a demographic questionnaire and the Parenting Stress Index-Full Form (PSI-FF) by the researcher.

The PSI-FF, which is a self-report questionnaire, takes 30 minutes to be filled out. The PSI FF consists of 120 items covering two main dimensions. PSI was firstly developed by Abidin (1990) to measure the level of stress in the parent-child relationship in parents of children aged 1 month to 12 years. Each item is rated on a 5-point Likert scale. The normal scores range from 175 to 245 with the score of 260 and above reflecting a high level of parenting stress where professional consultation for the stress is required.

Abidin (1990) reported internal consistency reliability coefficients (Cronbach's alpha) of 0.89 for the total score and 0.90 and 0.93 for child and parent domains respectively based on a study on 2633 mothers of children aged 1

CONSORT Flow Diagram

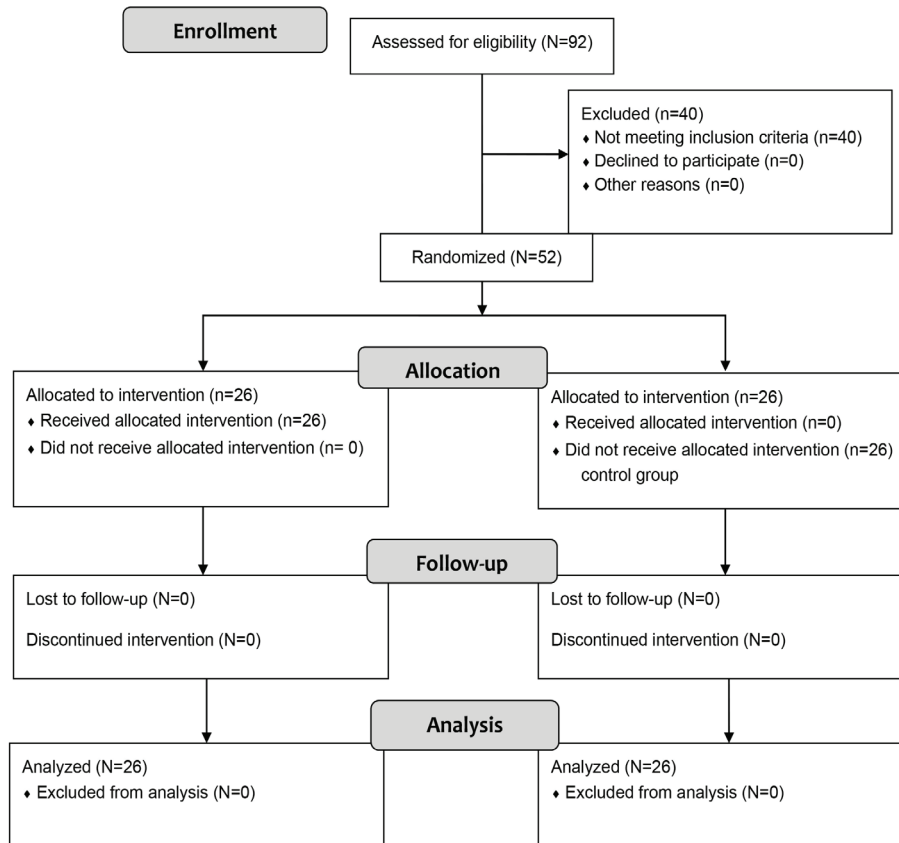


Figure 1: Design and protocol of the study

month to 12 years of age in the United States.¹⁴ The scale reliability and validity was also estimated and confirmed in Iran by Dadsetan et al. (2006) after being translated into Persian. The authors reported the Chronbach's alpha of 0.88 for validity and test-retest reliability coefficient of 0.94 with a 10-day interval.¹⁵

Demographic questionnaire was designed by the researcher including two separate sections enquiring about "the parent's characteristics" and "the child's characteristics".

The researcher explained the aims and method of the research to the participants in an orientation session and their anonymity and confidentiality of the data were guaranteed. After obtaining written informed consent, those who were willing to participate in the study filled out the demographic questionnaire. After excluding those who did not meet the inclusion criteria, the participants of both intervention and control groups were asked to complete the PSI questionnaire. Afterwards, the mothers in the intervention group attended a training program consisting of 5 two-hour sessions per week for 5 consecutive weeks. The presented topics and the purpose of the sessions, which were designed based on the guidelines of WHO and the United Nations Children's Fund, were as follows:

Session one: teaching self-awareness skills including contents concentrating on self-awareness and its importance, self-esteem, different types of self-awareness, emotional intelligence and characteristics of self-aware people.

Session two: teaching the techniques of dealing/coping with emotions including contents concentrating on concepts of emotions, strategies for coping with anger and techniques of assertiveness along with decisiveness.

Session three: teaching the skills of coping with stress, the definition of stress, stress and individuals' characteristics, the adverse effects of psychological stress, the symptoms of stress and its effects, techniques of coping with stress and stress management skills.

Session four: teaching problem-solving and decision-making skills, creative thinking,

critical thinking, the importance of problem-solving ability, defining the problem, solving the problem and making decision, consultation, having positive and negative thoughts facing the problem as well as critical and creative thinking.

Session five: teaching empathy and interpersonal relationship skills including contents concentrating on empathy and its importance, techniques of empathy and obstacles to empathy, the results of empathic behaviors, effective communication skills and principles of correct communication with a blind child.

The PSI questionnaire was filled out again by the participants of both the intervention and control groups once immediately after and once one month after the intervention to ensure the durability of the training effect. The mothers in the control group received no intervention during the study.

The collected data were analyzed using SPSS software, version 19. Statistical descriptive tests such as mean, standard deviation (SD) and frequency were used to describe the features of the data. Chi-square, independent t-test and repeated measures analysis of variances (ANOVA) tests were also used as appropriate. Kolmogorov-Smirnov (K-S) test was also applied to determine the normality of the distributions of quantitative variables. The significance level was set at <0.05.

For ethical considerations, this study was approved by the Ethics Committee of Shiraz University of Medical Sciences (Ethics Committee Approval Number: CT93767006). The researcher explained the aims and method of the research to the participants in an orientation session and their anonymity and confidentiality were guaranteed after obtaining written informed consent. All the information of the participants remained confidential and anonymous. The control group subjects were also trained as those mothers in the intervention group at the end of the study through one lecturing session and giving educational booklets and CDs.

RESULTS

Quantitative variables were distributed normally. Independent t-test and Chi-square test were used to compare quantitative and qualitative demographic variables respectively in the intervention and control groups. The results showed no significant difference between the two groups with respect to qualitative demographic variables including the mother's marital, educational and occupational status, number of children in the family, number of blind children in the family, sex of the blind child, birth order of the blind child, causes of blindness and severity of the blindness ($P > 0.05$). Also, the mean \pm SD age of the mothers in the intervention and control groups were 34.85 ± 6.20 and 35.69 ± 6.25 , respectively and the results of independent t-test showed no significant

difference between the two groups in this regard ($P = 0.86$).

The results of analysis of repeated measures showed no significant difference between the two groups with respect to the scores of all parenting stress domains (including parent and child domain as well as life stress) before the intervention (Table 1).

Moreover, the mean total scores of parenting scores were very similar in both groups and no significant difference was observed between the groups in this regard ($P = 0.76$).

The results showed a significant decrease in the mean scores of parenting stress in the intervention group compared to the control group before, immediately after and one month after the intervention ($P < 0.001$) (Table 2).

Furthermore, the changes in the

Table 1: Frequency distribution of demographic variables in the intervention and control groups

Variable		Groups				P value
		Intervention Group		Control Group		
		Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)	
Mothers' marital status	Married	25	96.2%	24	92.3%	1**
	Divorced	1	3.8%	2	7.7%	
Mothers' educational status	Primary education	5	19.2%	4	15.4%	0.56
	Lower secondary education	7	26.9%	6	23.1%	
	Upper secondary education	6	23.1%	7	26.9%	
	High school diploma	7	26.9%	7	26.9%	
	Higher education	1	3.8%	2	7.7%	
Mothers' occupational status	Employed	2	7.7%	2	7.7%	1**
	Housewife	24	92.3%	24	92.3%	
Number of children in the family	$3 \leq$	20	51.3%	19	45.7%	0.75
	$3 >$	6	46.2%	7	53.8%	
Number of blind children in the family	1	23	88.5%	23	88.5%	0.54**
	≥ 2	3	11.5%	3	11.5%	
Sex of the blind child	Male	14	53.8%	14	53.8%	1
	Female	12	46.2%	12	46.2%	
The cause of blindness	Congenital	12	46.2%	16	61.5%	0.26
	Non-congenital	14	53.8%	10	38.5%	
Birth order of the blind child	First-born child	14	53.8%	10	38.5%	0.27
	The second- or the later-born child	12	42.9%	16	57.1%	
Severity of the blindness	Completely blind	15	57.7%	11	42.3%	0.40
	Severe visual impairment	6	23.1%	7	26.9%	
	Moderate visual impairment	5	38.5%	8	61.5%	

*Statistically Significant at $\alpha \leq 0.05$; **Fisher exact test

Table 2: Comparison of the mean change of the parent and child domains scores and total parenting stress score in the participants of the intervention and control groups before, immediately after and one month after the intervention

Variable	Group	Time			P value*		
		Before the intervention	Immediately after the intervention	One month after the intervention	Time	Group	Group/Time
		Mean±SD	Mean±SD	Mean±SD			
Child domain	Intervention	115.19±6.82	106.15±6.85	108.46±6.88	<0.001	0.003	<0.001
	Group CI ^a	112.43, 117.94	103.38, 108.92	105.68, 111.24			
	Control Group	115.19±5.20	115.07±6.15	115.07±6.32			
	CI	113.09, 117.29	112.58, 117.55	112.52, 117.62			
Parent domain	Intervention	153.07±12.59	127.19±7.59	129.07±7.63	<0.001	<0.001	<0.001
	Group CI	147.98, 158.15	124.12, 130.26	125.99, 132.16			
	Control Group	151.42±8.88	151.42±8.71	152.00±7.87			
	CI	147.83, 155.01	147.90, 154.94	148.82, 155.18			
Total stress score	Intervention	273.15±14.63	238.19±9.72	243.11±10.94	<0.001	<0.001	<0.001
	Group CI	267.24, 279.06	234.26, 242.11	238.69, 247.53			
	Control Group	272.03±11.19	272.29±11.64	273.69±10.94			
	CI	267.51, 276.55	268.15, 277.23	269.27, 278.11			

^aConfidence interval; *Analysis of repeated measures

mean-scores of parenting stress were observed in the subscales of acceptability and reinforcement (child domain) and sense of competence, attachment, role restriction, depression, and social isolation (parent domain) (P<0.001).

It is noteworthy to mention that 95% confidence interval of the difference was applied for all continuous variables in this study.

DISCUSSION

Studying the effects of LST program on parenting stress, we found that the mean±SD total parenting stress score decreased significantly in the intervention group immediately after the intervention, reflecting the positive effect of trainings on decreasing the stress levels of the mothers with blind child/children. However, no significant difference was observed in the control group in this regard. Our results were similar to that of other researchers who reported that LST could reduce psychological tension in mothers with normal and mentally retarded children.¹⁶ Likewise, in another study, the analysis of covariance test results proved the effectiveness of behavior management training on reducing parenting stress of autistic children’s mothers

and enhancing their ability to cope with such stress.¹⁷ Hassall believed that parenting stress is associated with parental cognitive factors and family support.¹⁸ Howe, also, concluded that parental psychological status is one of the most important factors which contribute to interactive problems between the parents and their disabled children.¹⁹ On the other hand, training parents to develop parenting skills increased their parenting satisfaction and competence and decreased the child-parent conflicts as well.²⁰

Analysis of the changes occurring in the child domain signifies the fact that the training programs could improve the compatibility mechanisms in parents through providing adequate information on the children’s condition and appropriate behaviors with them. Accordingly, the program helps the parents better accept the children ‘conditions and play more effective roles in their children’ progress so that it consequently can reduce their stress.¹⁸ Kazdin concluded that providing cognitive problem solving skills and parenting management trainings to the parents of the children with antisocial behaviors, as one of the ten elements of life skill, had decreased such behaviors in their children.²¹

The changes of stress score in the

Adaptability and Demandingness subscales from child domain were not statistically significant in the intervention group. This finding is not consistent with those of some studies in this area. For instance, Yen et al. concluded that psychological interventions on children can reduce the child's anxiety and parenting stress in their mothers in all child domains' subscales including Adaptability and Demandingness.²² So, it seems that it would be better to concentrate on the problematic children to reach stress score reduction in such subscales of parenting stress.

In the current study, the parent domain has also undergone significant changes probably due to the fact that LST program played a supportive role to the mothers than their children.

A study on the efficacy of stress coping skills training on parenting stress of mothers with children suffering from attention deficit hyperactivity disorder reported that the training program could significantly decrease the total parenting stress scores in the participants of the intervention group in the subscales of Demandingness, restrictions of role, depression and social isolation.¹¹ Their findings were consistent with ours regarding the changes occurring in the parent domain.

LST program couldn't diminish stress score in the parent domain about mothers' relationship with their spouses in this study while Mohammadi et al. showed that LST program could qualify the relationship between parents of children with epileptic problems.²³ Botvin et al. found that LST program can qualify the general health.²⁴ However, we didn't find a significant reduction in stress score in Parental Health subscale from parent domain of the questionnaire. It seems that if the program had taken longer, it would have been more effective in this area.

Training the parents with blind children on life skills is recommended to the authorities of consultation, supportive and medical centers as well as department of education of exceptional children.

The present study only addressed the mothers of the blind children while large

scale studies are also required to examine the effects of the training programs on the fathers of such children. Considering our small sample size, as another limitation of the study, our findings cannot be generalized to other communities in other parts of the world since it was conducted at only one center and one region in Iran. Therefore, the researchers suggest further studies with a larger sample size to be carried out on the parents with deaf children or those with autism, mental retardation and other disabilities. Differences in individual and psychological characteristics of the participants especially in learning and completing the questionnaire were also other limitations that could not be denied.

CONCLUSION

It is concluded that LST program could reduce parenting stress in the mothers with blind children. Since parenting stress can also have negative personal and social consequences on physical and mental health of the blind children and their parents, LST is highly recommended to consultation, educational and health care centers as an efficient, cost-effective and simple technique for preventing and managing parenting stress of the parents with exceptional children.

For future studies, we suggest the researchers to investigate on the effectiveness of Life Skills Training on parenting stress of fathers of blind children and compare it to those of mothers, or on the QOL of their children.

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Conflict of Interest: None declared.

REFERENCES

- 1 Brezin AP, Lafuma A, Fagnani F, et al. Prevalence and burden of self-reported blindness, low vision, and visual impairment in the French community: a nationwide survey. *Archives of Ophthalmology*. 2005;123:1117-24.
- 2 Pascolini D, Mariotti SP. Global estimates of visual impairment: 2010. *British Journal of Ophthalmology*. 2012;96:614-8.
- 3 Ahmadpanah M. Visual Impairment and Child Development from Birth to Twelve. *Research on Exceptional Children*. 2004;11-14:3-32. [In Persian]
- 4 Gabler S. Foster Children's Attachment Development and Mental Health in the First Six Months of Foster Care Placement: Associations with Foster Parents' Stress and Sensitivity [thesis]. Erlangen-Nurnberg: der Friedrich Alexander University; 2013.
- 5 Murphy NA, Christian B, Caplin DA, Young PC. The health of caregivers for children with disabilities: caregiver perspectives. *Child: care, health and development*. 2007;33:180-7.
- 6 Sanders MR. Development, Evaluation, and Multinational Dissemination of the Triple P-Positive Parenting Program. *Annual Review of Clinical Psychology*. 2012;8:345-79.
- 7 Rodriguez CM, Green AJ. Parenting stress and anger expression as predictors of child abuse potential. *Child Abuse & Neglect*. 1997;21:367-77.
- 8 Kummabutr J, Phuphaibul R, Suwonnaroop N, et al. The Effect of a Parent Training Program, In Conjunction with a Life Skills Training Program for School-age Children, on Children's Life Skills, and Parents' Child-rearing Skills and Perceptions of Support for Child Life Skills Development. *Pacific Rim International Journal of Nursing Research*. 2013;17:3-27.
- 9 Weet T. life skills-Definition of terms [Internet]. New York (US): Unicef; 2003 [Cited 22 Nov 2013]. Available from: www.unicef.org/lifeskills/index_7308.html.
- 10 Howe D. Disabled children, parent-child interaction and attachment. *Child & Family Social Work*. 2006;11:95-106.
- 11 Behpajoooh A, Motevalipoor A, Farzad V, et al. The efficacy of stress coping skills training on parenting stress of mothers with children suffering from attention deficit hyperactivity disorder. *Journal of family research*. 2010;6:99-114.
- 12 Smith TB, Oliver MN, Innocenti MS. Parenting stress in families of children with disabilities. *American Journal of Orthopsychiatry*. 2001;71:257-61.
- 13 Dehi M, Jahangiri L, Tavakol KH, et al. Parental anxiety and quality of life in children with blindness in Ababasire institution. *Tolooe Behdasht*. 2009;13(4). [In persian]
- 14 Abidin RR. Introduction to the special issue: The stress of parenting. *Journal of clinical child psychology*. 1990;19:298-301.
- 15 Dadsetan P, Azghandi A, Hasanabadi H. Parenting stress and general health: a research on the relation between parenting stress and general health among housewife mothers and nurse-mothers with young children. *Journal of Iranian Psychologists*. 2006;2:171-84. [In persian]
- 16 Malekpour M, Farahani H, Aghayi A, Bahrami A. Effect of Life Skills Training on reducing psychological tension in mothers with normal and mental retard children. *Research on Exceptional Children*. 2006;20:661-76. [In persian]
- 17 Tahmassian K, Khoramabadi R, Chimeh N. The Effectiveness of Behavior Management Training on Parenting Stress of Autistic Children's Mothers. *Developmental Psychology: Iranian*

- Journal of Psychologists. 2012;8:269-77.
- 18 Hassall R, Rose J, McDonald J. Parenting stress in mothers of children with an intellectual disability: The effects of parental cognitions in relation to child characteristics and family support. *Journal of Intellectual Disability Research*. 2005;49:405-18.
 - 19 Howe D. Disabled children, parent-child interaction and attachment. *Child & Family Social Work*. 2006;11:95-106.
 - 20 Whittingham K, Sofronoff K, Sheffield J, Sanders M. Stepping Stones Tripple P: An RCT of a Parenting Program with Parents of a Child Diagnosed with an ASD. *J Abnorm Child Psychol*. 2009;37:469-80.
 - 21 Kazdin AF, Siegel TC, Bass D. Cognitive problem solving skills training and parent management training in the treatment of antisocial behavior in children. *J Consulting and Clinical Psychology*. 1992;60:733-47.
 - 22 Yen CF, Chen YM, Cheng JW, et al. Effects of cognitive-behavioral therapy on improving anxiety symptoms, behavioral problems and parenting stress in Taiwanese children with anxiety disorders and their mothers. *Child Psychiatry & Human Development*. 2014;45:338-47.
 - 23 Mohammadi A, AdalatZade G, Kiyani R, Sattarzadeh L. Investigating Effect of Life Skills Training on Family Functioning of Epileptic Peoples in Tabriz. *Procida-social and behavioral sciences*. 2011;30:2316-8.
 - 24 Botvin GJ, Griffin KW. Life skills training: Empirical findings and future directions. *Journal of Primary Prevention*. 2004;25:211-32.