

# The effectiveness of 'Care for Child Development' Program on the Sensitivity and Responsiveness Skills of Mothers

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## Introduction

The condition of child development under the age of 5 in Middle Eastern countries is worrying. In spite of decline in prevalence in developmental delay in most countries between 1990 and 2016, its frequency has increased significantly in some areas, such as North Africa and the Middle East. According to theoretical models, sensitivity and responsiveness comprise two of the important functions of the family. Responsiveness is an aspect of supportive parenting that plays an important role among different theories and research frameworks (such as attachment, social and cultural theories) in establishing a robust structure for the desirable development of children. Responsive interactions occur when caregivers recognize the child's verbal and non-verbal signs and respond to them accordingly.

The 'Care for Child Development'(CCD) program is designed by the World Health Organization (WHO) to empower caregivers, health workers and individuals working with families to promote child development. Many studies acknowledge the effectiveness of program in the context of health services in some countries such as, Pakistan, India and Turkey. Quantitative and qualitative indicators showed that the CCD program had the proper validation features and could be considered as an applicable program in the health programs of Iran. In this program, caregivers stand in need of three basic skills to make the optimum change in child: (1) sensitivity: being aware of the child's movements, gestures and voice and interpreting it, (2) responsiveness: responding in a timely manner and qualitatively to the child's signs and symptoms and (3) environmental enrichment and bonding: that is, to build trust and social relationships and to establish an emotional relationship between the child and the caregiver. This program has been modified by present researchers to meet the needs of Iran's health system. For the first time in Iran, CCD effectiveness on caregivers of children at risk of developmental delay is studied. The researchers are to reply to whether care for child development program affect the level of sensitivity and responsiveness of caregivers of children at risk of development delay.

## Methodology

This study is an applied research planned in quasi-experimental design with pre-test and post-test with Non-equivalent control group. The statistical population is all caregivers of children under the age of 3 at risk for development delay in Tabriz –Iran, who referred to Child Development Center (CCD) in Tabriz 2018-2019. Sampling method of the study is purposive sampling. Accordingly, 50 mothers of children, under the age of 3, at risk of developmental delay referring to Tabriz Child Development Center were selected and divided randomly into experimental and control groups. The independent variable in this study was the CCD program, which was adapted by the researchers based on the response to intervention approach. The experimental group was exposed to this variable (CCD) and the control group was not and received conventional treatment which was provided by their health and medical services. Also, during the intervention, none of the subjects were deprived of existing standard interventions. Both groups were evaluated at the beginning of the study and 3 months later. There were four sessions of Two-hours that were held weekly with two models of coaching and self-directed learning. Each session began with a challenging topic followed by caregivers discussing the problem and practicing the subject and skill in the classroom. The discussed subject was practiced for one week in the child's living environment by caregivers using self-monitoring tools (s/he is supposed to evaluate his/her performance in the process). The dependent variable is mothers' sensitivity and responsiveness skills to children at risk of developmental delay under the age of three. Data was collected using the social-emotional assessment/evaluation measure (SEAM) family profile and maternal caregiving quality scale.

## Results

According to the results of the presumptions, the covariance analysis test was applied to compare the mean scores of post-test maternal caregiving quality and responsiveness areas after monitoring pre-test in the two groups. The result of univariate analysis of covariance indicated that the effect of group was significant ( $F = 14.57, P < 0.05$  and  $F = 10.88, P < 0.05$ ). After controlling pre-test scores, the results show that there is a significant difference between the mean scores of the post-test in experimental and control groups in both variables of maternal caregiving quality and responsiveness area, which is indicative of the effectiveness of care for child development program on maternal caregiving quality and responsiveness. The Eta coefficient also indicates that 18% of the variations in maternal caregiving quality and 23% of the variations in the responsiveness of the variable can be explained by care for child development program. Mean difference between groups in provision of appropriate activities ( $t = 2.02, P < 0.050$ ), predictable programs ( $t = 2.3, P < 0.050$ ), and provision of a safe home and play environment ( $t = 3.8, P < 0.050$ ) was statistically significant. In other words the "care for child development" program was effective in promoting the competency of caregivers in all three variables.

## Conclusion

The results of this study specified that support and educational programs for parents with children at risk for development delay have positive consequences on parents, which can be explained by different aspects of the effectiveness of this program. In terms of the approach of interventions, this program is a combination of behavioral interventions, social support, and cognitive representations which is emphasized by Dunst, Kassow for enhancing sensitivity and responsiveness skills of parents (30). It is probable that combination of different interventions has increased the program's effectiveness. From the perspective of behaviorist theories, it is likely that helping parents understand their child's unique characteristics and providing guidance on how to build a positive relationship and interaction with their children are rewarding and reinforcing for parents. In this program, the caregiver learns with the help of techniques of the "Look, Listen, Touch" to understand the child's interests and feelings better and respond accordingly to the child's needs and interests. These techniques help parents to manage their children better and facilitate interaction between the caregivers and child. Also caregivers feel competent in the skills of sensitivity and responsiveness. On the other hand, as the role playing is a part of the CCD program, some caregivers learn about sensitivity and responsiveness through observational learning during the program. It can also be explained from the perspective of a self-directed learning theory that focuses on adult learning. In this program, promoting and protecting the development of children at risk are considered an important goals for caregivers and they have a relatively high motivation to achieve this goal. On the other hand, prior knowledge of caregivers which they achieved through formal and informal resources coupled with this new knowledge provides possible ways to move toward the primary goal of promoting the child development. The Caregivers will engage in learning activities in various situations such as group activities in the classroom and individually at home. They evaluate their performance through self-monitoring tools as well as program orientation from coaching to training over time that reinforce a sense of competence, independence, and self-worth in caregivers, which include targeting and motivation, goal orientation, and performance activities (43). Lack of control over some important variables, such as socioeconomic status and mental health status of caregivers, as well as data collection based on caregiver self-reporting, are limitations of this study. Due to the positive impact of program on caregivers in present research and other research from other countries and the simplicity of program and its non-dependence on special instruments, this program seems to be highly applicable and can easily be used at home, kindergartens and health centers. It can also be used as an applicable program in health system of countries.