



# A Study on Primigravida Mothers of Rural Karad Taluka, Maharashtra in Acknowledging the Child Developmental Milestones

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## Abstract

**Background:** The best moment for any women in this world is to give birth to her child after months of wait and anticipation. She is accompanied with overwhelming feelings of bliss and divinity. The process of growth and development continues throughout the entire life of a human being; however, the duration in which the integral changes take place is from inception to the end of youth. The health workers need to understand this early period as well as the total life cycle of an individual and understand the behavior of parents and other adults who pond care for the child. Thus, it is necessary to educate mothers in the antenatal period about the developmental milestones so that they can impart this knowledge during the care of their children and also this will help them to rule out any developmental delay in their children at the earliest. **Objective:** To acknowledge child developmental milestones in primigravida mothers of rural Karad taluka, Maharashtra. **Method:** A study was conducted with 98 subjects from in and around Karad. They were selected on the basis of the criteria of inclusion and exclusion and a prior written consent was also taken. Primigravida mothers were included in the study. Then they were assessed with the help of a structured questionnaire on child development milestones. The data was then collected and analysed accordingly. **Result:** After analyzing the data, it was found that primigravida mothers had 53% knowledge about biological development, 34% knowledge about sensory development, 42% knowledge about social development, 28% knowledge about cognitive development, and 36% knowledge about moral development. **Conclusion:** The knowledge about child developmental milestones in primigravida mothers is inadequate. Out of all the developmental domains, they have considerable knowledge about biological development (53%) and the least knowledge about cognitive development (28%).

**Keywords:** Child Development, Developmental Milestones, Growth, Infant, Primigravida Mothers

## 1. Introduction

An infant is someone who becomes a child and then an adolescent passing through his parent's lives and disappearing into an adult a full-fledged person, with all life and a future all his own. No one can slow this process at any point in time<sup>1</sup>.

The best moment for many women in this world is to give birth to her child after months of wait and anticipation<sup>2</sup>.

A child arrives in an environment that is filled with joy and excitement<sup>3</sup>. A healthy and a well-built child mostly grows into a physically and mentally strong adult with escalated quality of developed human aid<sup>4</sup>. Physical wellbeing of a child is of great emphasize since it is related to the psychological and communal development<sup>5</sup>.

A child develops quickly in the infant stage<sup>6</sup>. An important aspect of the life of a child which differentiates him/her from an adult is known as 'Growth'. In the postnatal life, the newborn instant reclines helplessly with disorganized activity.

As the age progresses, he/she gains better co-ordination of motor activity and willfully react to his or her environment until he blends into a fully integrated and autonomous individual<sup>7</sup>. The process of development of a child's behavior is very complicated<sup>8</sup>. A home is a place where a child will not only achieve a connection with the family but will also gain a sense of emotional and moral security and assurance. This, further will nurture the progress of a properly developed behavioral component<sup>9</sup>.

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Growth refers to the measure of physical maturation evidenced by reduplication of cells and the rise in intracellular matter results in an increase in the size of the body<sup>10</sup>. Developmental milestones involve overall development of various systems and aspects like intellectual, language, moral, motor, sensory, spiritual, social, etc.<sup>11</sup>

Development is a measure of functional or physiological maturation and myelination of the nervous system and it signifies the accomplishment of mental, emotional, and social abilities. It is rather difficult to assess development<sup>12,13</sup>.

A developmental milestone is skills that involve human functions and tasks that are related to age that most children can do over a certain period<sup>14</sup>. When a child can execute more complex things as they grow older, this is what we mean by child development<sup>15</sup>. Although each milestone has an age level, a normally developing child achieving a particular milestone may differ according to the actual age<sup>16</sup>.

Being a child's first teacher, parents play a very integral part in the overall development and learning<sup>17</sup>. If children receive sensitive and compatible caregiving from their parents early in life, they develop strong affection towards their parents. This, in turn, helps them to grow and learn<sup>18</sup>.

During childhood, mothers play an important role in the development of their children. The initial first year following birth, children need maximum physical responses from their parents, especially from their mothers in the form of touch, play, verbal interactions, etc<sup>19</sup>.

Just as growth and development occur in the child, so also must the process of development occur in the parents as they keep pace with his natural maturation<sup>20</sup>.

During the first year of an infant's life, the parents must learn the cues like what the child is trying to tell them and then act on their observations<sup>4</sup>. They must learn to observe their infant's behavior and to act toward fulfilling his needs<sup>6</sup>. Some parents, unfortunately, are not prepared to undergo the emotional development needed for their child's development<sup>10,19</sup>. Nurses many a time can interpret this process to parents and thus alleviate much of their misunderstanding<sup>11</sup>. Since an infant is not old enough to tell how he feels, his parents should watch for signs and symptoms of discomfort and illness<sup>7</sup>.

The young infant is completely dependent upon his environment with crying almost his only means of communication<sup>17,5,8</sup>.

Mothers are considered as the primary caregivers and they can identify various changes occurring in their children including the developmental delays<sup>13</sup>. Motherhood is a never-ending, on-going process that a woman experiences in her entire lifetime. It begins right from her fetal life and continues up till she raises her own child<sup>18</sup>.

A study was conducted amongst 60 low-income adolescent mothers having children having an age range of 0 to 28 months in Michigan, the US in 2002 to find out their knowledge regarding domains of child development<sup>15,16</sup>. The mothers' were asked to predict the age at which children are first able to involve in age-specific activities related to cognition, language, motor activities, play, and social activities<sup>3</sup>. The results showed that mothers had a decent idea about the order of developmental abilities respective to the other but had lesser knowledge regarding the time of these developmental abilities<sup>12</sup>. Concerning the timing, mothers tended to underestimate the onset of all developmental abilities i.e., they foretold their child's developmental ability will occur early than it does<sup>14</sup>.

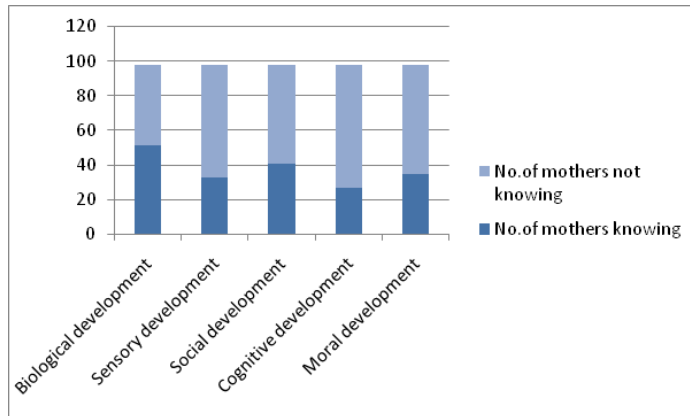
## 2. Methods

This study is a cross-sectional study undertaken to acknowledge child developmental milestones in primigravida mothers and to create awareness about it in them. Mothers whose child's age is up to 12 months were included. Multigravida mothers and mothers who are unwilling to participate are excluded. The written consent of the patient was taken. The study is ethically approved. A structured questionnaire on child developmental milestones was used as a study tool.

The sample size was calculated by the percentage of knowledge taken at 56.41% as a study has shown that overall mean percentage on domains of child development was 56.41% in rural areas of village Panchayatan of Gautam Budh Nagar District, Uttar Pradesh; therefore 56.41% was taken for knowledge of child developmental milestones in primigravida mothers. Hence for calculation of sample size  $p=56.41\%$  and  $q=100 - p=43.59\%$  sample size  $n=4pq/L2$  therefore  $n=98$ . Simple random sampling is used to select the subjects for study and it is conducted in and around Karad Taluka.

## 3. Result

The study was conducted among 98 participants in Karad of the Satara District in Maharashtra. It included primigravida mothers and their children aged up to 12 months. According to this study, it was found that primigravida mothers had 53% knowledge regarding biological development, 34% knowledge about sensory development, 42% knowledge about social development, 28% knowledge about cognitive development, and 36% knowledge about moral development. Based on this study it was found that knowledge about child developmental milestones was statistically extremely significant ( $p < 0.0001$ ).



**Graph 1.** The above given graph represents number of mothers to the various aspects of child developmental milestones. According to these 52 mothers have knowledge about biological development, 33 mothers have knowledge about sensory development, 41 mothers have knowledge about social development, 27 mothers have knowledge about cognitive development and 35 mothers have knowledge about moral development.

## 4. Discussion

The aim was to study the knowledge of child developmental milestones in primigravida mothers in Karad Taluka. Inclusion criteria were primigravida mothers whose children are aged up to 12 months and those who are willing to participate. Exclusion criteria were multigravida mothers and mothers whose children are beyond the age of 12 months. The study was conducted with 98 subjects in and around Karad. Participants were selected based on inclusion and exclusion criteria. Primigravida mothers were included in the study. Participants were explained the study procedure. Prior consent was taken in written from these participants. Then they were assessed with a structured questionnaire on child developmental milestones. The survey was done according to the results obtained and hence the conclusion was given.

The best moment for any women in this world is to give birth to her child after months of wait and anticipation. She is accompanied with overwhelming feelings of bliss and divinity. The process of growth and development continues throughout the entire life of a human being; however, the duration in which the integral changes take place is from inception to the end of youth. The health workers need to understand this early period as well as the total life cycle of an individual and understand the behavior of parents and other adults who pond care for the child. Thus it is necessary to educate mothers in the antenatal period about the developmental milestones so that they can impart this knowledge during the care of their children and also this will help them to rule out any developmental delay in their children at the earliest.

Previous studies were carried out to assess knowledge on domains of child development amongst the mothers of rural areas of the village panchayat, Gautam Budh Nagar, Uttar Pradesh by Miss. Kinley Choden, Miss. Kumari Koyal and Mr. Kundan Kumar, the purpose of this study was to assess knowledge on domains of child development amongst the mothers, which concluded that mothers had an overview about the developmental milestones and that it depends on their child's present developmental level and also the mothers were not quite aware and accurate about the tentative time of each milestone that occurs.

So in primigravida mothers, it was seen that knowledge about various milestones was inadequate. Multiple factors may be responsible for this inadequacy which if at the earliest detected can help to arrest many possible mistakes due to this poor knowledge on or before time.

This study helped to create awareness amongst the primigravida mothers about the various domains of health, growth, and development related to the child thus further preventing any avoidable mistake which holds great significance if detected at the earliest while also providing both mother and child with a great and healthy future.

And thus, in this study we came to know that primigravida mothers had 53% knowledge about biological development, 34% knowledge about sensory development, 42% knowledge about social development, 28% knowledge about cognitive development and 36% knowledge about moral development.

## 5. Conclusion

The knowledge about child developmental milestones in primigravida mothers is inadequate. Out of all the developmental domains, they have considerable knowledge about biological development (53%) and the least knowledge about cognitive development (28%).

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