

## Association of breastfeeding cessation with health-related quality of life in working multiparous women of Rawalpindi and Islamabad

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### Abstract

Breastfeeding rates in Pakistan are the lowest in South Asia. Multiparous working women in Rawalpindi-Islamabad often think if cessation of breastfeeding will affect their and their baby's health. A descriptive cross sectional survey was conducted on 200 multiparous working women to evaluate the association between cessation of breastfeeding and health-related quality of life in multiparous working women and to determine the common reasons of breastfeeding cessation. A modified SF-36 QOL questionnaire was used. The mothers who breastfed their babies for less than or up to six months reported their general health worse at the time of study than one year ago, which accounts for 34(68%) of the entire data, 42(21%) women ceased to breastfeed their babies due to less milk production and 31 (15.5%) women due to the nature of their job. Chi-Square test showed that there is a significant association (i.e. p-value < 0.001) between health-related quality of life and early breastfeeding cessation.

**Keywords:** Breast feeding cessation, Health-related quality of life, Working multiparous women.

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### Introduction

The World Health Organisation and United Nations Children's Fund (WHO/UNICEF) recommend exclusive breastfeeding as the main source of nutrition for infants during their first six months of life. Current US rates of any and exclusive breastfeeding are suboptimal compared with medical recommendations. With early cessation of breastfeeding, disease onset had to occur before the child turned 20 years.<sup>1</sup> Breastfeeding rates, however, tend to decline as national income rises; in Asia between 1995 and 2010 exclusive breastfeeding rate decreased from 31

to 29%.<sup>2</sup> In India, poor feeding practices in early childhood contributes to the burden of malnutrition, and infant and child mortality,<sup>3</sup> According to the Promoting Healthy Development Survey (PHDS) early cessation of breastfeeding have negative impact on the child's health (risk for developmental, behavioural or social delays and overall health status) as well as the mother's health including the risk of depression, deterioration of overall health as well as physical and mental health.<sup>4</sup> In Pakistan, perinatal depression is associated with early cessation of breastfeeding as well as negative perception of insufficient milk production.<sup>5</sup>

However, despite this well-known recommendation not all mothers breastfeed their children whether partly or fully during this time.<sup>6</sup> Optimal breastfeeding has both short- and long-term benefits for the mother and infant. Globally, approximately 38% of infants are exclusively breastfed until around the age of four months indicating that early cessation of exclusive breastfeeding (EBF) is prevalent in many countries.<sup>7</sup> Sociodemographic factors appear to be the reason for early cessation of breastfeeding.

Professional and non-professional occupation and plan to work full time after childbirth decreases the likelihood of breastfeeding initiation.<sup>8</sup> Mothers who engage in optimal breastfeeding practices have a lower risk of developing breast and ovarian cancer as well as type 2 diabetes. Exclusive breastfeeding and predominant breastfeeding is associated with longer duration of amenorrhoea. Shorter duration of breastfeeding is associated with higher risk of postpartum depression.<sup>9</sup>

The World Health Organisation recommends that the child should be breastfed at least for six months of life, and is preferably continued till two years of age. Though it is possible that for some reasons such as quality of work, personal circumstances, etc. the mother might not be able to continue breastfeeding, it is suggested to do so for at least the first six months.<sup>10</sup>

### Methods and Results

A cross sectional survey was conducted through convenient sampling technique from 200 multiparous

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**Table-1:** Reasons of Breastfeeding Cessation(n=200).

Reason of Breast Feeding Cessation	Frequency	Percentage
Difficulties with Lactation	26	13.0
Infant Nutrition and Weight	20	10.0
Breast Infection	6	3.0
Pregnancy	21	10.5
Premature Birth of Baby	6	3.0
Nature of Job of Mother	31	15.5
Less Milk Production	42	21.0
Unfeasible Working Environment	19	9.5
Intentional Stopping	29	14.5
Total	200	100.0

**Table-2:** Health related Quality Of life (n=200).

Health Comparison with Last Year	Frequency	Percent
Much Better Than One Year Ago	7	3.5
Somewhat Better Than One Year Ago	36	18.0
About the Same	57	28.5
Somewhat Worse Than One Year Ago	68	34.0
Much Worse Than One Year Ago	32	16.0
Total	200	100.0

working mothers between the age of 20 to 40 years from hospitals, institutes and community in the Rawalpindi and Islamabad region, between July 2016 to January 2017. The sample size was calculated by using Rao calculator.<sup>11</sup> It was found to be 200 keeping in view 6.86% margin of error, 95% of confidence interval, 20,000 population size with 50% response distribution.

The Sf-36 QOL questionnaire was modified according to research requirements and used for data collection. This modified sf-36 questionnaire contains 20 questions related to physical, emotional, breast and general health of the participants. It also includes different reasons of breastfeeding cessation. Ethical approval for the study was obtained from Ethical Review Committee, Riphah International University, Islamabad. Data were analysed using SPSS 21.

The mean age of the participants was  $30.95 \pm 4.01$  years, out of which 74(37%) were gravida 3 and 84 (42%) were para 2. In this study, it was revealed that the mode of delivery of 46(23%) of them was SVD, 56(28%) had a C-Section, and 27(13.5%) underwent episiotomy while the rest 71(35.5%) went through induced labour.

The most common reasons for cessation of breastfeeding in multiparous working women reported in this study are shown in Table-1.

The main focus of this study was to highlight the

association between quality of life and breastfeeding cessation in working multiparous women and also to find out the most common reasons of breastfeeding cessation. This study includes 200 respondents from different workplaces in Rawalpindi and Islamabad with a mean age of  $30.9 \pm 4.01$  years. Four feeding groups, based on duration of breastfeeding, were assessed in this study; they were breastfeeding for 3-6 months, 7-12 months, 13-18 months, and 19-24 months. A total of 97 (48.5%) women reported that they nursed their last child up to three to six months of age. In this study, six domains regarding quality of life were assessed using Modified SF-36 questionnaire. These domains include physical and emotional health problems, social activities, breast health problems, general pain and general health. Of the six domains of modified SF-36 scores, the physical health and general health perception as compared to one year ago were significantly different among these four feeding groups. The mothers who breastfed for less than or up to six months reported their general health as worse at the time of study than one year back, that accounts for 34% of the entire data.

According to the results, regarding physical health of multiparous working women in the past three to six months, 146(73%) women informed that they cut down the amount of time they spent on work or other activities, 144(72%) said that they accomplished less than they would have liked to, 143(71.5%) found work limitation in any kind of activities and 136(68%) stated that they had difficulty performing work and had to put in extra effort.

The study showed that because of emotional problems, 96(48%) women felt so low and depressed most of the time that they thought that nothing could make them happy, 84(42%) of women said that most of the time they felt bored and tired, while another 87(43.5%) women felt happy and 95(47.5%) women had a lot of energy some of the time, while 95(47.5%) felt calm and peaceful.

Out of 200 participants 100 women (50%) stated that their physical or emotional health interfered with their social activities and they sometimes found it difficult to visit their friends or relatives.

The study revealed that 185(92.5%) women didn't feel any asymmetry between both breasts, 146(73%) women reported no pain in either of the breasts and 187(93.5%) noticed no sign of infection.

General pain assessment revealed that 85 (42.5%) women felt moderate body pain that interfered moderately with the work of 73(36.5%) participants; 94(47%) women felt slight body pain and in 80(40%) participants this pain

slightly affected their daily work.

While describing general health, 107(53.5%) women believed that their health was getting worse and 82(41%) said that their health wasn't good at all. A total of 75(37.5%) women couldn't tell if they got sick easily or that if they were as healthy as anybody else.

Table-2 shows the percentages of health condition of working multiparous women in comparison with last year.

When we applied Chi-Square test to check the association between health-related quality of life (QOL) and cessation of breastfeeding in working multiparous women, the obtained results showed that P-value was 0.000 which means that there is association i.e. P-value < 0.001 between breastfeeding cessation and general health condition of the working women.

## Discussion

Breastfeeding attitude is significant in infant well-being and health because of its several short- and long-term benefits to mothers, children, family as well as communities.<sup>12</sup> Intention of mothers to breast feed is one of the potentially strongest modifiable factor associated with breastfeeding behaviour.<sup>13</sup> Breastfeeding attitude is a constantly considerable prognosticator of absolute breastfeeding initiation and duration.<sup>14,15</sup> It is established in the antenatal phase and predisposed by multi-dimensional factors.<sup>16</sup> Several studies have documented that breastfeeding attitude is determined by maternal attributes including ethnicity,<sup>13</sup> age,<sup>17</sup> educational level,<sup>18</sup> parity,<sup>19</sup> confinement nanny,<sup>20</sup> employment status,<sup>18</sup> pregnancy intention,<sup>21</sup> and preceding experience of breastfeeding. Health-related quality of life can give mean results differently in natives across different ethnic or cultural backgrounds. Pregnancy expresses an exclusive condition in women's lives, resulting in an obvious metabolic, physiological, psychological and social changes that may change their aptitude to perform their established roles and draw them away from their health-related quality of life.<sup>22</sup> In 2016, a study conducted by Tsai S-Y et al, documented that decreased and interrupted sleep during pregnancy adversely affects the mean scores of mental ( $47.10 \pm 9.19$  to  $50.26 \pm 8.61$ ) and physical ( $41.10 \pm 7.19$  to  $45.72 \pm 7.16$ ) component of health-related quality of life scores.<sup>23</sup> When inquired about emotional health problems in our study, 96 (48%) of the women reported that most of the time they feel so down that nothing could cheer them up, 84 (42%) felt tired most of the time during the past three to six months after breastfeeding cessation. Eivind Ystrom conducted a longitudinal cohort study on

breastfeeding cessation and symptoms of anxiety and depression and found that there is an association between maternal symptoms of anxiety and depression and early breastfeeding cessation. He investigated whether breastfeeding cessation was related to an increase in symptoms of anxiety and depression from pre-partum to six months post-partum. He also investigated whether anxiety and depression increased after cessation of breastfeeding for those women who were already suffering from high levels of anxiety and depression during pregnancy. He reported that discontinuation of breastfeeding was related to the levels of anxiety and depression during pregnancy, and to an increase in postpartum anxiety and depression. He also concluded that anxiety and depression in pregnancy interacted with the relation between breastfeeding cessation and postpartum anxiety and depression.<sup>24</sup> Our study also demonstrated the significant relationships between breastfeeding attitude and health-related quality of life among pregnant women. One possible understanding is that women who have better health-related quality of life are satisfied and happy with their daily needs; thus, they learn to emphasise the significance of health. Women probably consider breastfeeding as tremendously important given the numerous health benefits, and they are keen to adopt healthy breastfeeding behaviours. In our study, women with better health-related quality of life may have positive attitude to breastfeeding. On the contrary, attributes of poor health-related quality of life comprise fatigue, poor functional status, energy loss, anxiety, depression, restricted activities and performance difficulties. These findings explain the lack of initiative of pregnant women with poor health-related quality of life to share their feelings with others or ask for pragmatic help to use antenatal care services.<sup>25</sup> Previous studies suggested that women with less antenatal visits had lower health-related quality of life.<sup>26</sup> Therefore, women with poor health-related quality of life tend to have negative breastfeeding attitude.

## Conclusion

Health related quality of life of our working mothers is significantly affected by cessation of breastfeeding, while less milk production was reported as the most common reason of stopping breastfeeding.

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