### **Original Article**

# Knowledge, Attitude and Practice on Breastfeeding in the Rural Field Practice Area in Tamil Nadu

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Breastfeeding is the primary event of the utmost importance that is required to be executed within one hour of birth. Exclusive breastfeeding up to a certain age is considered to hold significant importance. The study would investigate the Knowledge, Attitude and Practice of breastfeeding in the rural field practice area in Tamil Nadu. Exclusive breastfeeding has been proposed as the best nutritional option for infants up to six months of age. In the age of 19-32 years, female groups the 230; 19-21 year's age group showing 43 percent. Hindu, Muslim and Christian in the ratio 182:21: 27. Pre-lacteal feed as Factor affecting the Breastfeeding practices- in accordance with the duration of each breastfeeding characterization which is less than 10 mins. Out of 230 females, 35 breastfed their children from one side with a 15 percent outcome. In 195 females who are breastfeeding their children from both sides have 85 percent. Study shows that socio-economic factors are important for long-term breastfeeding. Findings suggest that a mother's sense of control over breastfeeding and perceived acceptance will affect the intentions and behavior of mothers.

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#### Key words: Breastfeeding, Knowledge, Attitude, Practice, Tamil Nadu, Pre-lacteal Feed.

Preastfeeding is the primary event of the utmost importance that is required to be executed within one hour of birth<sup>1</sup>. For the newborn, the only compatible source of nutrients is the breast milk of the lactating mother. Breast milk fed children have a greater chance of survival than a child artificially fed<sup>2</sup>. Further, it also renders protection to the newborn from malnutrition and other infections. Exclusive breastfeeding up to a certain age is considered to hold significant importance in not only reducing the mortality and morbidity rates of the children but also their effective development<sup>3,4</sup>. Breastfeeding should begin within one hour of birth, breast milk is the ideal food for the infant<sup>5,6</sup>.

Giving breastfeeding immediately after delivery prevents PPH in large amounts<sup>7</sup>. Given the importance of breastfeeding the current study would investigate the Knowledge, Attitude and Practice on breastfeeding in the rural field practice area in Tamil Nadu. This section of the study would elaborate on breastfeeding, it's the appropriate time of initiation, the importance of breastfeeding and its implications in the growth and development of the child. The section would conclude with the rationale behind the genesis of the study.

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### Editor's Comment :

 Socio-economic factors, sense of control and perceived acceptance of social breast feeding will affect the intention and behaviour of the Mother's.

#### **Research Problem:**

Exclusive breastfeeding or the practice of feeding the infant for the first 6 months of life on breast milk only without any other type of food, not even water has been recommended as the best feeding alternative for infants up to 6 months owing to its protective effect against mortality and morbidity<sup>2,4</sup>. In this regard recommendations from international bodies such as the American Academy of Pediatrics (AAP) and World Health Organization (WHO) states exclusive breastfeeding for the first 6 months and continued breastfeeding for at least 12 months to be compulsory. The same could be continued up to the age of 2 years or beyond depending upon the desire of the child<sup>5</sup>.

However, advocates of breastfeeding have noticed a significant decline in the exclusive breastfeeding behavior among nursing mothers specifically in developing countries<sup>6</sup>. Global statistics have shown that only 46.4% of the mothers in India exclusively breastfed their children in the first 6 months. Whereas the rates of breastfeeding in 0-6 months are 56.2 percent in Kerala and 0-3 month's exclusive breastfeeding is 68.5%<sup>1</sup>.

Knowledge about breastfeeding has been identified to have a significant correlation with the attitude and practice of breastfeeding. Improving women's

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educational level has clear impacts on the health of the newborn<sup>2,5</sup>. There have been studies that investigate the knowledge, attitude and practice of breastfeeding of lactating mothers in different parts of India, there has been no specific research that focuses on rural field practice areas in Tamil Nadu. The current study intends to fill the gap by conducting a cross-sectional study that would investigate the knowledge, attitude, and practice on breastfeeding among the mothers in Dharmapuri, a city in the western part of Tamil, Nadu, India.

#### **AIMS AND OBJECTIVES**

The objectives of the study will be listed in this section of the study.

- To highlight the status of breastfeeding and associated health of infants in rural India.
- To emphasize the importance of breastfeeding in ensuring the healthy development of the child.
- To investigate the impact of the demographic factors on the breastfeeding trend among mothers.
- To investigate the knowledge, attitude and practice of breastfeeding among the mothers.
- To propose the probable measures that could enhance the status of breastfeeding.

#### **Literature Review:**

It is necessary to understand the determinants of the decisions of the mothers regarding long-term breastfeeding in order to encourage breastfeeding for up to 12 months after and beyond<sup>2,5,7</sup>. In a retrospective study on feeding children, 80 participants who breastfed nine-month-old infants were used to illustrate the expected behavioral theory. The longer they were breastfed, the more participants received less approval for breastfeeding. The approval received did not explain the intended prenatal duration but strongly explained the expected duration at 9 months after the first day<sup>5,7</sup>. Nevertheless, the perceived number of control mothers during breast-feeding clarified the prenatal and 9-month breastfeeding intentions. The weaning reasons for 9 to 12 months showed the effects of perceived power but not perceived acceptance. Such results indicate the importance of (1) measures to make long-term breastfeeding socially acceptable and (2) ongoing guidance and support for long-term breastfeeding<sup>7</sup>.

As per the World Health Organization, neonatal deaths account for 45 percent of the under-five. More than one percent of these deaths occur in the first 24 hours of birth, while three-quarters of neonatal deaths occur in the first seven days. The aim of this study is to assess the awareness, attitudes and practices of mothers in the province of Badin Sindh in Pakistan

regarding the treatment of young people and their related factors<sup>27</sup>. Within 48 hours of delivery, the survey examined the factors related to the breastfeeding decision<sup>8,13</sup>. The Mother's response to the issue of child feeding preference was tested against food records. A number of issues related to perceived maternal lactation support for six persons. There was also a collection of issues affecting the decision of the mother on breast or bottle feeding. There have been a number of different trends in bivariate connections between assistance and breastfeeding between ethnic and maritime groups. In order to find out where breastfeeding support was most relevant, single and multiple logistic analyzes were conducted within ethnic groups<sup>8,14</sup>. The support of the male partner was significant among the Anglo-Americans. A wide range of research questions that follow has been raised. This suggests that effective support may be a significant intervention variable, but that the individual supporting the intervention program differs from ethnic to ethnic groups<sup>8</sup>.

In-hospital self-efficacy in breastfeeding has been measured and 4 weeks of insufficient milk perception has been measured. Although most mothers plan to breastfeed exclusively, less than 40% were breastfeeding at 4 weeks of age<sup>9,15,16</sup>. In 73% of mothers using the formula considered the primary cause of supplementation or complete cessation of breastfeeding to be inadequate milk. In the immediate postpartum period (r=0.45, p<0.001), mothers were significantly associated with their perception of insufficient milk for hospital breastfeeding in 4 weeks postpartum. Multiple hierarchical regression has shown that lactating self-efficacy is 21 percent different from the mother's expectations of insufficient milk and is independent of socio-demography9. Modifiable factors affecting women's breastfeeding are: focus on breastfeeding, self-efficacy of breastfeeding and social support. Additional stereo promotion strategies often involve social support and do not address sufficient attempts to change the purpose and self-efficiency of breastfeeding<sup>10,17</sup>.

During the period from 1 August to 30 September, 2005, a survey of questionnaires administered by health personnel was carried out. The levels of initiation were 72.7 and 84.4 percent, respectively, within 1 hour and 24 hours of delivery. Within two months of birth, 82.3 percent of mothers had exclusive breastfeeding<sup>11,18</sup>. As the first feed, 332 babies (86.2 percent) had breast milk/colostrum, but 17.2 percent had breast milk or breast milk from another mother. 14 percent of infants received a pre-lacteal feed.

Formula feed (6.2 percent), sugar water (5.9 percent), and cow's milk (2.8 percent) are all popular pre-lactate feeds. 12.7 percent of mothers had additional feed added. The study of logistic regression affected the exclusive breastfeeding habits and forms of delivery of the mother and the first feeding of the baby<sup>11</sup>.

The frequency of delays in LS-II ranges from 11 to 44 percent, which is most likely to occur with primiparity<sup>12,19</sup>. Delayed LS-II was correlated with a variety of factors with mixed evidence: Cesarean section, prolonged phases of work II, stress, maternal age, diabetes, obesity, inadequate breastfeeding, and pre-onset supplementation<sup>12,20-22</sup>. The objective was to determine how primary breastfeeding mothers affect the influence of birth and maternal / infant factors on the LS-II Na+ marker. The involvement of gestational diabetes poses a risk of high na+ breast milk for 48 hours<sup>12,23-25</sup>. This reduces the development of breastfeeds, indicating the initiation of lactogenesis II (mean=8,91, SD=3,77)<sup>12,26</sup>.

#### MATERIALS AND METHODS

This cross-sectional research study was conducted among 230 pregnant mothers in Government Dharmapuri Medical College and Hospital. Research classes included a 3 months delivery of pregnant women's and a study period of a purposive random sampling of 4 months. The analysis was completed one month after October 2017 with 230 participants. Inclusion criteria: Mothers came for delivery from rural field practice area to the government dharmapuri medical college and hospital and those mothers who are willing to take part in the study are included.

Participants were fully informed and written consent was obtained on the nature and purpose of the study. The research was conducted using an anonymous questionnaire specifically designed to obtain qualitative and quantitative data for the classification of semi-designed semi-structured, pre-tested proforma, simple random sampling, frequency and percentage only predictions. Knowledge concerns related to preventive measures such as the use of safety tools and intervention in the event of an unknown source have also been addressed.

Before the study was conducted, the Institutional Ethics Committee received clearance of the research procedure. In order to identify the different aspects of the Institutional Clearance Obtained, the results were evaluated under different headings. The methods used were MS Excel and other simple data analysis techniques.

#### RESULTS

## A Socio-economic of the Mother as Factor Affecting the Breastfeeding Practices —

As shown in Table 1, the socio-economic factors ie, age, religion, income, employment, type of delivery, education and gravida. In the age of 19-32 years, female groups the 230; 19-21 years age group showing 43 percent, 22-24 years group showing 21 percent, 25-27 years group shows 22 percent and 28-32 years group shows 14 percent. In religion, the groups were taken *Hindu*, *Muslim*, *and Christian* in the ratio 182:21: 27 showing 79, 9, 12 percent respectively.

While when we compare the income (Rs/month) category there is a variation from low to high-income status. From 600-1500 income categories have 122 females with a percentage of 53 percent. From the 1501-4000 income category, we've 27 females with 27 percent. From the 4001-7000 income category, we've 47 females with 21 percent. From the 7001-12000 income category, we've 26 females with 11 percent. From the 12001-15000 income category, we've 5 females with 2 percent. From the 15001-20000 income category, we've 3 females with 1 percent.

Here's another category which is on the basis of employment, those who are *unemployed* are 156 females and 68 percent, and when compared to *employed* that would be 38 percent in 74 females. The

Table 1 — Showing the factors as, Age, Religion, Income and many other factors Affecting the Breastfeeding Practices				
	Factors	Frequency	Percentage	
Age	19-21 years	100	43%	
	22-24 years	48	21%	
	25-27 years	51	22%	
	28-32 years	31	14%	
Religion	Hindu	182	79%	
	Christian	21	9%	
	Muslim	27	12%	
Income (Rs/month)	600-1500	122	53%	
	1501-4000	27	27%	
	4001-7000	47	21%	
	7001-12000	26	11%	
	12001-15000	5	2%	
	15001-20000	3	1%	
Employment	Employed	74	32%	
	Not employed	156	68%	
Type of Delivery	Normal	220	96%	
	LSCS	10	4%	
Education:				
Illiterate		4	2%	
1 <sup>st</sup> to 5 <sup>th</sup> (primary school)		31	13%	
6 <sup>th</sup> to 10 <sup>th</sup> (middle school)		78	34%	
	high school)	56	24%	
Degree		61	27%	
Gravida	Primi	94	41%	
	Multi	136	59%	

next category is the type of delivery; in a *normal* delivery, we have 220 females with 96 percent and the other one is via *LSCS* includes 10 females with 4 percent.

On the basis of education, we've *illiterate*, *primary school*, *middle school*, *high school*, *degree* category females in which out of 230 only 4 are *illiterate* with 2 percent, and 31 females have *primary school* education and 13 percent outcome. In 78 females have *middle school* education showing 34 percent. 56 females have *high school* education showing 24 percent. 61 females have *a degree* qualification 27 percent. The last factor is on the basis of gravida we have two forms which are 94 *primi* females with 41 percent and 136 *multi* females with 59 percent.

## Pre-lacteal Feed as Factor Affecting the Breastfeeding Practices —

In accordance with the duration of each breastfeeding characterization which is *less than 10 mins* we've 41 females with 18 percent outcome; other is on the basis of *till the baby sleeps* we've 179 females with 78 percent outcome, next is *leaves on its own* females we've 10 females with 4 percent outcome. The next category is the frequency of breastfeeding is 52 females with *on-demand* breastfeed with 23 percent; and 178 other females who are breastfeeding at *regular intervals* with 77 percent outcome.

Another category is on the basis of Mode of breastfeeding out of 230 females 35 females are breastfed their children *from one side* with 15 percent outcome and meanwhile, the 195 females who are breastfeeding their children *from both sides* have 85 percent. This category is Exclusive breastfeeding means herein, this 218 females said yes with 95 percent outcome and yet those who said no are 12 females and have 5 percent outcome.

Herein the next category is colostrum fed in 198 females and others discarded have 32 females, resulting in 86 percent and 14 percent respectively. The next category is pre-lacteal breastfeeding given to 143 females and not given to 187 females, resulting in 19 percent and 81 percent.

The next category is pre-lacteal feeds range in 14 females with healthy fed, 179 females with custom fed, and 10 females for others feeds; resulting in 18 percent in healthy fed, 78 percent with custom feed, and 4 percent with others feeds. The next category is what kind of pre-lacteal feed given with sugar in 41 females with 18 percent, and with honey 32 females with 14 percent outcome. Next category in Positioning during breastfeeding with the Sitting position in 208 females with 90 percent and in Lying position in 22 females with 10 percent resulting.

The next category is Does breastfeeding reduce mothers' beauty<sup>11</sup> with 13 females says *Yes* with 6 percent, and 217 females with 94 percent say *no*. The last category is what care should be given after breastfeeding, *Put on the shoulder till burping* in 210 females with 91 percent outcome and *Putting baby in lolly(cradle) to sleep* in 20 females with 9 percent outcomes (Table 2).

#### **D**ISCUSSION

A group of mothers was strongly encouraged to breastfeed and volunteered to take part in a cross sectional study. The study included However, only a small part of these inspired mothers had a breastfed year. What factors have affected these long-term breastfeeding decisions? The Government Dharmapuri Medical College and Hospital, Infant Feeding Survey provided quantitative and qualitative evidence to address this important issue by analyzing the purpose of breastfeeding and the actions of breastfeeding mothers for 4 months.

Table 2 — Pre-lacteal feed as Factor affecting the Breastfeeding practices				
Factors	Frequency	Percentage		
Duration of each breastfeeding				
<10 min	41	18%		
Till the baby sleeps	179	78%		
Leaves on its own	10	4%		
Frequency of breastfeeding				
On-demand	52	23%		
Regular intervals	178	77%		
Mode of breastfeeding				
From one side	35	15%		
Both sides	195	85%		
Exclusive breastfeeding means				
Yes	218	95%		
No	12	5%		
Colostrum				
Fed	198	86%		
Discarded	32	14%		
Pre lacteal feed				
Given	43	19%		
Not given	187	81%		
Pre lacteal feeds	4.4	100/		
Healthy	41	18%		
Customs	179	78%		
Others	10	4%		
What kind of pre-lacteal feed given	41	18%		
Sugar water	32	14%		
Honey Positioning during breastfeeding	32	14%		
Sitting	208	90%		
, and the second	200	10%		
Lying 22 10% Does breastfeeding reduces mothers beauty				
Yes	13	6%		
No.	217	94%		
What care to be given after breastfeeding				
Put on the shoulder till burping	210	91%		
Putting baby in lolly(cradle) to sleep	20	9%		
r dailing baby in long (ordato) to sleep	20	0 /0		

A Socio-economic of the mother as Factor affecting Breastfeeding practices. In the age of 19-32 years, female groups the 230; 19-21 years age group showing 43 percent. Hindu, Muslim and Christian in the ratio 182:21: 27 showing 79, 9, 12 percent respectively. From 600-1500 income categories have 122 females with a percentage of 53 percent. In a normal delivery, we have 220 females with 96 percent and the other one is via LSCS. Pre-lacteal feed as Factor affecting the Breastfeeding practices- in accordance with the duration of each breastfeeding characterization which is less than 10 mins. Out of 230 females, 35 females have breastfed their child from one side with 15 percent outcome and 195 females who are breastfeeding their child's from both sides with 85 percent. Next category is Positioning during breastfeeding with the Sitting position in 208 females with 90 percent and in the Lying position in 22 females with 10 percent. Muthulakshmi M, Gopalakrishnan S, study says 72 percent have good knowledge, 92 percent have a good practice and 94 percent have a good practice. The good practice among mothers can be seen to exceed the level of knowledge between them. Mothers have a positive attitude and good practice despite a slightly lower level of knowledge.

Descriptive research has been conducted with the aim of exploring breastfeeding awareness, attitudes, and practices among postnatal mothers and factors affecting them in the Pediatrics Department of South India's Neonatal Division. Data were obtained from qualified interviewers using a standardized proforma of 100 postnatal mothers. In addition to demographics, mothers were asked about their breastfeeding experience and their behaviors and practices. In areas of breastfeeding time (92 percent), colostrum feeding (56 percent), and exclusive breastfeeding time (38 percent), as well as breastfeeding time (51 percent) and breast-saving breastfeeding, maternal awareness, was inadequate<sup>2,4,20</sup>. Better outcomes were substantially linked to higher maternal age, better maternal education, higher socio-economic status and prenatal care. Programs that promote and encourage breast-saving of younger, less well-educated women and those of lower social and financial classes continue to be important, particularly at the primary care level<sup>2</sup>. Girish, Seena and M Gandhimathi study say, Understanding for mothers was not sufficient in areas such as lactation (92 percent), colostrum lactation (56 percent), exclusive lactation (38 percent), breastfeeding (51 percent) and breastfeeding during childhood. Higher maternity age and improved maternity education were significantly linked to improved scores, higher socioeconomic status and antenatal care2.

Research has been conducted on infant feeding behavior among antenatal women in Belgaum, Karnataka, a selected maternity hospital. They found that 91.9 percent of women in antennas thought breast milk was better for infants, 85.1 percent felt breast milk was easier to digest, 21.4 percent felt that the formula was safer for a baby, 86.1 percent felt sheep were more convenient and 79 percent felt it was cheaper. There has been a significant correlation between infant feeding behavior and a variety of variables, such as age, self-education and spousal education, and self-employment<sup>2,12,18</sup>. Researchers also reported a moderately positive outlook for infant feeding among the majority of antenatal mothers. This means that more effort is needed from healthcare professionals, in particular healthcare professionals, who take care of antenatal women in the hospital and, in turn, educate and change their actions in a very positive way<sup>2</sup>. George, Neethu, et al study says, Exclusive breastfeeding of 31.85 percent and exclusive breastfeeding of only 61.1 percent of participants felt that all participants had original milk removed, 8.6 percent knew breastfeeding was cancer-protective, 23.2 percent thought that baby and breast milk needed water, 25.8 percent felt breastfeeding was essential for breastfeeding and most mothers had neutral breastfee. There is still a low level of attitude and knowledge with regard to breastfeeding, which means that this issue needs to be addressed urgently. "Unmet breastfeeding fitness" needs to be assessed and addressed as unsatisfactory for family planning. Our study shows that long-term breastfeeding is affected by socio-economic factors. Findings suggest that a mother's sense of control and perceived acceptance of breastfeeding may affect the behavior of the mothers.

In a study done by Al Ketbi MI, et al 72.6 percent of breastfeeding was taken within 1 hour; this figure was higher than that recorded in the Saudi Arabian survey (31 percent) and focused on WHO guidelines for breastfeeding. This difference in breastfeeding may represent the efforts of Abu Dhabi hospitals to achieve child-friendly practices and to set up a 10-stage WHO breastfeeding initiative<sup>2</sup>. 16.9 percent of the mothers in our sample reported continuous exclusive breastfeeding for up to 6 months without any supplement. This figure was comparable in several other studies in the region and in the US (15.9%) to that reported in another Report in Saudi Arabia, but was lower than the figure reported in studies in Uganda (49.8%). In contrast to the Saudi Arabia reports, the higher exclusive breastfeeding rate at 6 months may

be explained by the fact that an increase in our sample (81.2%) assumed breast milk alone was adequate for the child during the first 6 months of his or her life compared with a lower percentage (28%), in a Saudi Arabia report<sup>3</sup>.

Krishnendu M, Devaki G, 2017 say in their study. In total, 84.1 percent of lactating mothers were given breast milk for the first feed. The findings are almost as follows: in the survey, 19 percent of pre-lactate feed use<sup>15</sup>, the survey provided almost twice as many prelactate feeds to children in Kerala, the provision of prelactate feed to children is customary<sup>17</sup>, with a 95 percent negative attitude towards feeding their children. Pre-lactate foods are the most common feeds found in this sample, mostly as honey or sugar water, and are recorded in the 2007 study<sup>3</sup>. Pre-lactate feeds are considered to be laxative when the meconium is extracted. Unfortunately, mothers are not aware of the pollution that can be caused by pre-lacteal feed. Studies show that previous breastfeeding begins to consolidate the cycle earlier and more successfully, resulting in a stronger post-natal effect resulting in the earlier initiation of breast milk secretion<sup>1,3</sup>.

Breast milk is the safest way to feed and provide the nutrients needed by infants for healthy development and growth, according to the WHO<sup>26</sup>. As for breastfeeding awareness, our study showed that 54.6 percent of mothers knew they were expected to start breastfeeding within an hour of birth. 57.5 percent knew that neonates did not receive pre-lacteal feeding and 55.6 percent said that their neonates would receive colostrum. These figures did not match the findings of the study in Ethiopia; there was a better awareness of breastfeeding among respondents<sup>12,27</sup>. Pathak, Nitin Kumar, and Pankaj Kumar's study say, this is consistent with a study that has shown that 75 Percent of mothers know that they must continue breastfeeding until they are 2 years of age. There was a significant difference (p<0.05). Prior literature has also shown that mothers who do not breastfeed have negative breastfeeding behaviors<sup>9</sup>.

In the report, approximately 80.9% claimed that breastfeeding would start within the first hour of birth, 95.9% reported that the newborns should not have the pre-lacteal feed, while 96.4% claimed that the newborn should have colostrum<sup>27</sup>. The explanation that the research was performed in Ethiopia, relative to the analysis carried out in rural areas, maybe because the information surrounding neonatal treatment differentiates from that in urban areas<sup>14</sup>. Some studies have also shown that both mother and infant have psychological advantages because breastfeeding is a

time of fitness and closeness that nurtures the relationship between the two. Mothers from urban backgrounds, in line with previous research, have a higher IIFAS score and a more positive breastfeeding attitude. Maternal education was one of the most important determinants of EBF practice<sup>9</sup>.

Our study showed that 23 percent of nursing mothers provided pre-lactate food. The results of the study were similar to those of Bhale P, Kishore S, Garg BS and Parmar VR, which accounts for 43.96 percent of pre-lactate feed prevalence, 45 percent and 42 percent. Compared to 84.5 percent of mothers offering baby demand, 62.8 percent of lactating mothers feed their infants on request 12-14,18,20,22,24,26.

#### CONCLUSION

In conclusion, this study has shown that socioeconomic factors that are important for long-term breastfeeding and how these factors can be modified over time can be used as a conceptual context. These findings, in particular, suggest that a mother's sense of control over breastfeeding and the perceived acceptance of social breastfeeding will affect the intentions and behavior of the mothers. These findings found that measures to change social expectations and increase social assistance could significantly improve breastfeeding practices over a period of 12 months or longer. The development and evaluation of these approaches should be included in future studies. Empowering mothers with trust and social support to continue breastfeeding would bring significant benefits of long-term breastfeeding to an increasing number of mothers and children.

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## DISCLAIMER



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