

A Descriptive Correlational Study to Assess the Attitude of Post-Natal Mothers Regarding the Practice of Exclusive Breast Feeding to their Neo-Borne Child in Selected Rural Areas of Tripura

Dr. Ashok Kumar Dhanwal¹, Maitri Chaudhuri²

¹PhD in Nursing

²Corresponding Author, Principal, Nurses Training Institute, Agartala Government Medical College and G B P Hospital, Agartala, West Tripura, India

Abstract: ***Background:** Only 71 percent of children fewer than 6 months are exclusively breastfed and only 46 percent started breastfeeding in the first hour of life (as recommended). **Materials and method:** Descriptive correlational study was carried out in selected three district of Tripura. The data was collected from randomly selected three Sub-Centres under 3 primary health care centres of selected three districts and MCH clinic of one government state hospital. **Result:** Out of total 105 post-natal mothers, maximum were belonged to the age group of 18 to 27 years (77.14%), 49.52% of the participant's undergone middle level of education. The value of R is 0.5023 determined a moderate positive correlation, which means there is a tendency for high attitude (variable) scores go with high Practice (variable) scores (and vice versa). The correlation between attitude and practice is exist. The P-Value is <.00001. The result is significant at $p < 0.05$. **Conclusion:** Practice of Exclusive breast feeding is fully depends on the attitude of post-natal mothers. The present study findings revealed a strong positive correlation between the attitude and practice of the study samples.*

Keywords: Post-natal mother; Attitude; Breastfeeding; Practice

1. Introduction

Breastfeeding is one of the most effective ways to ensure child health and survival [https://www.who.int/health-topics/breastfeeding#tab=tab_1 [1]. Breast milk is the ideal food for infants. Breast milk provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one third during the second year of life [https://www.who.int/health-topics/breastfeeding#tab=tab_1 [2]. Initiation of breastfeeding within the first hour of birth followed by exclusive breastfeeding for six months and continued breastfeeding for up to two years or beyond offer a powerful line of defence against all forms of child malnutrition, including wasting and obesity. Breastfeeding also acts as babies' first vaccine, protecting them against many common childhoods illnesses [https://www.who.int/news/item/01-08-2021-joint-statement-by-UNICEF-executive-director-henrietta-fore-and-who-director-general-dr.-tedros-adhanom-ghebreyesus-on-the-occasion-of-world-breastfeeding-week [3]. The theme of World Breastfeeding Week 2020 is "Support breastfeeding for a healthier planet". WHO and UNICEF are calling on governments to protect and promote women's access to skilled breastfeeding counselling, a critical component of breastfeeding support [https://www.who.int/news/item/31-07-2020-world-breastfeeding-week-2020-message] [4]. A joint message from UNICEF and WHO on Global Breastfeeding are: **INVEST** to make skilled breastfeeding counselling available to every woman. **TRAIN** health care workers, including midwives and nurses, to deliver skilled breastfeeding counselling to mothers and families. **ENSURE** that counselling is made available and easily accessible.

[https://www.who.int/news/item/31-07-2020-world-breastfeeding-week-2020-message [5]. The Global Strategy for Infant and Young Child Feeding aims to revitalize efforts to promote, protect and support appropriate infant and young child feeding [https://www.who.int/publications/i/item/9241562218 [6]. Transmission of active COVID-19 (virus that can cause infection) through breast milk and breastfeeding has not been detected to date. There is no reason to avoid or stop breastfeeding [https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-breastfeeding [7]. There is also some evidence that, after vaccination, antibodies are found in breast milk, which may help protect the baby against COVID-19 [https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-breastfeeding [8]. Globally in 2020, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height), and 38.9 million were overweight or obese [https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding [9]. Only 71 percent of children under 6 months are exclusively breastfed and only 46 percent started breastfeeding in the first hour of life (as recommended). only one in seven children in Tripura receive breast milk and complementary foods at age 6-8months [http://rchiips.org/nfhs/NFHS-4Reports/Tripura.pdf] [10].

So, in the above perspective it is imperative to study the correlation between the attitudes of post-natal mothers regarding the practice of Exclusive Breast feeding to their neo-borne child in selected rural areas of Tripura.

Volume 10 Issue 9, September 2021

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

2. Materials and Methods

Study Setting

This descriptive correlational study was carried out in selected three district of Tripura. The data was collected from randomly selected three Sub-Centres under 3 primary health care centres of selected three districts and MCH clinic of one government state hospital.

Sample size: 105 post-natal mothers were selected purposively ([at] of 35 post-natal mothers in each district) for this present study.

Criteria for selection of Sample Subject were:

- 1) Post-natal mother who are receiving services from selected government health agency.
- 2) Willingness to participate in the study.
- 3) The health agency was accessible within 5 kms. distance from the mothers home.

Data Collection Procedures

Formal administrative approval and permission was obtained from the Director of Health Services, Government of Tripura, Agartala for conducting this research study under the selected districts of Tripura. The data were collected from March'2021 to June' 2021. The three randomly selected sub-centre, primary health care centres and one government state hospital were visited on the days that were scheduled for post-natal care. The post-natal mothers were approached while they waited to receive their postnatal care, stated the objectives of the study and seek their consent to participate in the present study. Voluntary participation was encouraged. Consent has been taken from those who were willing to participate, explaining the benefits of participating in the study and confidentiality also taken care of. The data was collected in their local language (Bengali) using a pre-tested questionnaire and by face-to-face interview method. The time taken by the researcher to complete the interview of one respondent was 10 to 15 minutes.

Inclusion Criteria

Post-natal mothers having infants aged 0–6 months of age and attended on the scheduled post-natal clinic day to the selected health agencies.

Exclusion Criteria

Post-natal mothers those who were not interested to participate in the present study.

Data Collection tools

The data was collected using two tools. A structured interview scheduled used for collection of background data of the post-natal mothers and socio-demographic characteristics. A five point Likert Scale is used for assessment of attitude of the post-natal mothers. Background data of the post-natal mothers: information pertaining to personal details of the subject such as name, age, parity,

number of living children, number of ante-natal contact, mode of delivery and post-natal period. Socio-demographic data includes education, occupation, family income, type of family.

The 5 point Likert scale provided options such as strongly agree, agrees, sometimes, disagree and strongly disagree. This scale helped in identifying the attitude of the post-natal mothers capturing the positives and negative attitudes towards breastfeeding. The scale composed of 10 statements for assessing the attitude of postnatal mothers and 10 practice questions for assessing the practice of exclusive breast feeding, by the rural mothers.

Statistical analysis: The data collected was checked for completeness, coded and entered into Microsoft excel and analysed using SPSS online calculator. The data was analysed using descriptive statistics comprising of frequencies, percentages and measures of central tendencies, Pearson's correlational formula is used to analyse the correlation between the attitudes of the participants to practice breastfeeding.

3. Ethical Considerations

After taking administrative permission from the state government and participants' informed consent was obtained explain risk and benefits of the study.

4. Results

The data obtained are tabulated after statistical analysis.

Table 1: Frequency and Percentage Distribution of the Mothers by their Age, Parity, Number of living Children, Age of the Youngest Child, number of ante-natal contact, mode of delivery and post-natal period, N = 105

S. no	Sample Characteristics	Frequency	Percentage
1.	Age		
1.1.	18 – 27 years	81	77.14
1.2.	28 – 37 years	19	18.09
2.	Parity		
2.1.	Parity one	54	51.42
2.2.	Parity two	34	32.38
2.3.	Parity three and above	12	11.42
3.	Number of Living Children		
3.1.	One child	54	51.42
3.2.	Two children	34	32.38
3.3.	Three and above children	12	11.42
4.	Number of Ante-natal Contact:		
4.1.	< 8 contact	64	60.95
4.2.	8 contact	22	20.95
4.3.	>8 contact	14	13.33
5.	Mode of Delivery		
5.1.	Normal Virginal Delivery	79	75.23
5.2.	Caesarean section	21	20
6.	Post-natal Period of the mothers		
6.1.	0 to 6 months	105	100
6.2.	>0 to 6 months	0	0

Table 2: Frequency and Percentage Distribution of the Mothers by their Education, Occupation, Family Income and Type of the Family, N = 105

S. no	Sample Characteristics	Frequency	percentage
1.	Education:		
1.1.	Illiterate	03	2.85
1.2.	Primary	29	27.61
1.3.	Middle	52	49.52
1.4.	Madhyamik and H. S. Passed	12	11.42
1.5.	B. A. and above	4	3.80
2.	Occupation:		
2.1.	Housewife	98	93.33
2.2.	Service	2	1.90
3.	Family Income in Rupees:		
3.1.	Below Rs.2000 per month	5	4.76
3.2.	Rs.2001 –Rs.3500 per month	42	40
3.3.	Rs.3501 –Rs.5000 per month	27	25.71
3.4.	Rs.5001 and above	26	24.76
4.	Type of Family:		
4.1.	Nuclear	65	61.90
4.2.	Joint	35	33.33

Table 3: Attitude of the participants towards breastfeeding, N=105.

S. No.	Statements	Frequency and Percentage				
		Strongly Agree	Agree	Some times	Disagree	Strongly Disagree
		F (%)	F (%)	F (%)	F (%)	F (%)
1	Breast feeding develops strong bonding between mother and child.			55 (52.38)	22 (20.95)	23 (21.90)
2	Do you think Breast feeding should be initiated within ½ an hour after birth. (practice)		8 (7.61)	2 (1.90)	69 (65.71)	26 (24.76)
3	Do you believe Colostrum feeding is harmful for new borne baby (a Social Stigma)	18 (17.14)	10 (9.52)	2 (1.90)	10 (9.52)	65 (61.90)
4	Do you believe that, Only Breastfeeding should be continued up to 6 months of your baby’s age?		6 (5.71)	58 (55.23)	29 (27.61)	12 (11.42)
5	Breast feeding is harmful during minor ailments of baby	5 (4.76)	-	39 (37.14)	25 (23.80)	40 (38.09)
6	Do you think breastfeeding should be on demand of your baby?			12 (11.42)	44 (46.66)	49 (46.66)
7	Do you think proper positioning of the post-natal mother will facilitate feeding to your baby?		8 (7.61)	42 (40)	43 (40.95)	12 (11.42)
8	Do you believe that Regular changing of your cloths will prevent Sore or cracked nipples or any other breast infection?		6 (5.71)	41 (39.04)	42 (40)	16 (15.23)
9	Do you think that consumption of a balanced diet; Drink lots of healthy fluids have the influence on breast feeding?		17 (16.19)	20 (19.04)	47 (44.76)	21 (20)
10	I am afraid of disfigurement due to breast feeding to my baby	-			100 (95.23)	5 (4.76)

Table 4: Shows the Tabular Representation of post-natal mothers’ attitude regarding exclusive breast feeding to their babies’

Attitude Level	Item wise Response (%) of the Post-natal mother
Strongly Agreed	Item 3 (17.14%), Item 5 (4.76%)
Agreed	Item 2 (7.61%), Item 3 (9.52%), Item 4 (5.71%), item 7 (7.61%), Item 8 (5.71%), Item 9 (16.19%),
Sometimes	Item 1 (52.38%), Item 2 (1.90%), Item 3 (1.90%), Item 4 (55.23%), Item 5 (37.14%), Item 6 (11.42%), Item 7 (40%), Item 8 (39.04%), Item 9 (19.04%),
Disagreed	Item 1 (20.95%), Item 2 (65.71%), Item 3 (9.52%), Item 4 (27.61%), Item 5 (23.80%), Item 6 (46.66%), Item 7 (40.95%), Item 8 (40%), Item 9 (44.76%), Item 10 (95.23).
Strongly Disagreed	Item 1 (21.90%), Item 2 (24.76%), Item 3 (61.90%), Item 4 (11.42%), Item 5 (38.09%), Item 6 (46.66%), Item 7 (11.42%), Item 8 (15.23%), Item 9 (20), Item 10 (4.76%).

Table 5: Practice of exclusive Breastfeeding by the participants, N=105.

S. No	Items	Options	
		Yes	No
		F (%)	F (%)
1.	Did you start breast feeding to your baby within ½ an hour after birth?	69 (65.71)	36 (34.28)
2.	Was your baby fed with colostrum?	58 (55.23)	47 (44.76)
3.	Do you Fed your baby frequently-the more you nurse, the more you may produce milk?	82 (78.09)	23 (21.90)
4.	Do you maintain hygiene and cleanliness before feeding to your baby?	87 (82.85)	18 (17.14)
5.	Do you practice for you that, having balanced diet, drink lots of healthy fluids before feeding to your baby?	71 (67.61)	34 (32.38)
6.	Would you like to continue only Breastfeeding up to 6 months of your baby?	80 (76.19)	25 (23.80)
7.	Do you change your cloths regularly to prevent Sore or cracked nipples or any other infection?	103 (98.09)	2 (1.90)
8.	Do you continue breastfeeding when you are not feeling well or sick?	59 (56.19)	46 (43.80)
9.	Do you fed your baby when he/she is sick?	86 (81.90)	19 (18.09)
10.	Do you maintain proper positioning for you and your baby to facilitate effective feeding of your baby?	90 (85.71)	15 (14.28)

5. Findings and Discussion

Back ground information of the study participants: Out of total 105 post-natal mother, maximum were belonged to the age group of 18 to 27 years (77.14%), 51.42, % participants were having number of living children one, 60.95% participants undergone less than 8 (eight) ante-natal contact with their health care provider. Maximum 75.23% participants' mode of delivery was normal vaginal delivery whereas 20% delivery was conducted by caesarean section. 100% were under post-natal period of 0 to 6 months [Table 1].

Socio-demographic Characteristics

Educational characteristics of the participants reveal that 49.52% of the participant's undergone middle level of education. The census percentage of female literacy (census 2011) rate in Tripura is 82.73%, which signifies that even the rural population of women are also literate. A total of 93.33% of the participants were housewife. Average monthly income of post-natal mother was (40%) in the category of 2001 to 3500. Maximum 61.90 % of them were from nuclear family [Table 2].

Regarding Attitude of the participants towards breast feeding, maximum 52.38% participants' attitude towards statement 1 is under sometimes category, majority 65.71% are disagreed for statement 2, 61.90% are strongly disagreed for statement 3, 55.23% participants' are sometimes believe that, Only Breastfeeding should be continued up to 6 months of your baby's age, 38.09% were strongly disagreed the statement 5, 46.66% participants' are strongly disagreed regarding breastfeeding should be on demand of her baby, 40.95% participants are disagreed the statement 7, 40% are disagreed that, Regular changing of cloths will prevent Sore or cracked nipples or any other breast infection. Maximum 44.76% are disagreed the statement 9, majority 95.23% participants' are disagreed the statement 10 [Table 3]. The present study findings are also supported by Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J. *et al* (2020) they have found that 24.0% strongly disagreed that giving breast milk for a newborn immediately and within an hour is important, and 47.9% disagreed that discarding the colostrum is important.

Regarding Practice of exclusive Breastfeeding by the participants, the present study revealed according to the verbal response of the post-natal mother maximum 69

(65.71%) participants have started breast feeding to their baby within ½ an hour after birth, Globally, 3 in 5 babies are not breastfed in the first hour of life [WHO, 2021]. Initiation of breastfeeding within the first hour of birth followed by exclusive breastfeeding for six months and continued breastfeeding for up to two years or beyond offer a powerful line of defence against all forms of child malnutrition, including wasting and obesity. Breastfeeding also acts as babies' first vaccine, protecting them against many common childhood illnesses [WHO & UNICEF jointly 1 August 2021].

58 (55.23%) babies were fed with colostrum, evidence from the study of Mashail Basheir Alshammari, Hassan Kasim Haridi (2021), they found that, 24% reported initiation of breastfeeding within one hour after delivery; majority (76.8%) fed colostrum to their new-born; 82 (78.09%) were practiced frequently feeding their babies, majority 87 (82.85%) maintain hygiene and cleanliness before feeding to their babies. Maximum 71 (67.61%) had balanced diet, drink lots of healthy fluids before their babies breast fed, 80 (76.19%) like to continue only Breastfeeding up to 6 months of your babies age. The findings of present study is consistent enough with the findings of the study conducted by Wolde Melese Ayele (2019), and reported that, the prevalence of exclusive breastfeeding practice was 77.5%. The WHO and the United Nations Children's Fund (UNICEF) recommend that children be exclusively breastfed for the first 6 months of life—meaning no other foods or liquids are provided, including water. However, the global picture falls short of these standards, as only about 40% of infants aged 0–6 months old are exclusively breastfed. This is far below the widely accepted “universal coverage” target recommended by WHO/UNICEF that there should be 90% EBF in children less than 6 months in developing countries [Mashail Basheir Alshammari, Hassan Kasim Haridi (2021)].

WHO and UNICEF (27 May 2020) recommend that babies be fed nothing but breast milk for their first 6 months, after which they should continue breastfeeding – as well as eating other nutritious and safe foods – until 2 years of age or beyond. 103 (98.09%) change cloths regularly to prevent Sore or cracked nipples or any other infection, maximum 59 (56.19%) continue breastfeeding even when they are not feeling well or sick, 86 (81.90%) fed their babies when he/she is sick and majority 90 (85.71%) maintain proper position while breast fed their babies [Table 5].

Table 6: Correlation of Item wise Attitude and practice Score (Q means Statement)

Scores	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Mean Value	Value of R (r)	P Value
Attitude	242	202	221	268	212	173	257	247	243	205	2.383	0.5023.	<.00001.
Mean score	4.56	1.92	2.10	2.55	2.01	1.64	2.44	2.35	2.31	1.95			
Practice	69	58	82	87	71	80	103	59	86	90	2.157	0.5023.	<.00001.
Mean Score	2.30	1.92	2.10	2.55	2.01	1.64	2.44	2.35	2.31	1.95			

The value of R is 0.5023 determined a moderate positive correlation, which means there is a tendency for high attitude (variable) scores go with high Practice (variable) scores (and vice versa). The correlation between attitude and practice exists. The P-Value is <.00001. The result is significant at $p < .05$.

Karl Pearson's Correlation Coefficient Formula is used to measure the degree of linear relationship between the attitude and practice of exclusive breast feeding by the rural post-natal mothers.

$$r = \frac{\sum_i (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_i (x_i - \bar{x})^2} \sqrt{\sum_i (y_i - \bar{y})^2}}$$

The present study findings on relationship between samples attitude and practice score is 0.715352 indicate there is a strong positive correlation between the attitude and practice of the study samples.

Strength of association	Coefficient	
	Positive	Negative
Small (Weak)	0.1 to 0.3	- 0.1 to-0.3
Medium (Moderate)	0.3 to 0.5	- 0.3 to-0.5
Large (Strong)	0.5 to 0.9	- 0.5 to-0.9
Perfect	+1	- 1

Source: Dr. Suresh K. Sharma, Nursing Research and Statistics, third edition (2018), pp.487.

Table 7: Guidelines to Interpreting Pearson’s Product Moment Correlation Coefficient

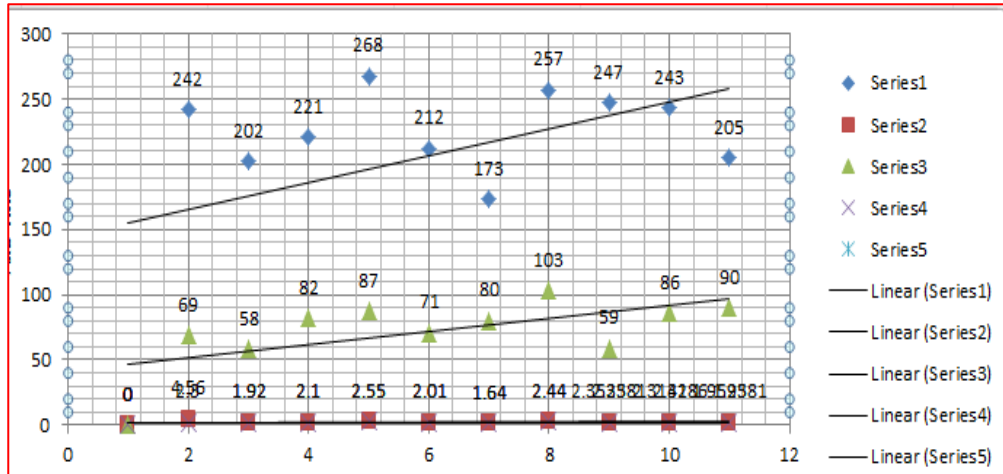


Figure 1: Scatter diagram showing Correlation of Item wise Attitude and practice Score

6. Strengths and Limitations

The tool of this study has been developed based on the related literature and relevant to the sample subjects. To ensure the content validity of the tool it was validated by 5 (five) nursing (PhD in Nursing) experts in different field of nursing specialization. Although **55.23% participants’ are sometimes believe that, Only Breastfeeding should be continued up to 6 months of your baby’s age, maximum 80 (76.19%) like to continue only Breastfeeding up to 6 months of your babies age.** However, the limitation of the study is that, the present study is limited to only three districts in Tripura **and the researcher has selected the sample purposively. The study findings may not be generalised due to small sample size.**

7. Conclusions

Practice of Exclusive breast feeding is fully depends on the attitude of post-natal mothers. The present study findings revealed a strong positive correlation between the attitude and practice of the study samples. The item wise R value 0.5023 determined a moderate positive correlation, which means there is a tendency for high attitude (variable) scores go with high Practice (variable) scores (and vice versa). The health care delivery service providers have the greater responsibility to organize health education programme and mother-craft classes on importance of breast feeding.

8. Abbreviations

EBF: exclusive breastfeeding,, WHO: World Health organisation, UNICEF: United Nations International Children Emergency Fund.

9. Competing interests

We declare that we have no competing interests.

10. Acknowledgements

We would like to express our gratitude to all the mothers who participated in this study.

References

- [1] https://www.who.int/health-topics/breastfeeding#tab=tab_1. <https://www.who.int/news/item/01-08-2021-joint-statement-by-unicef-executive-director-henrietta-fore-and-who-director-general-dr.-tedros-adhanom-ghebreyesus-on-the-occasion-of-world-breastfeeding-week>. <https://www.who.int/news/item/31-07-2020-world-breastfeeding-week-2020-message>.
- [3] <https://www.who.int/news/item/31-07-2020-world-breastfeeding-week-2020-message>.
- [4] <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-breastfeeding>.
- [5] <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-breastfeeding>.

- [6] <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>.
- [7] <http://rchiips.org/nfhs/NFHS-4Reports/Tripura.pdf>.
- [8] Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J. *et al.* Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *Int Breastfeed J*15, 70 (2020). <https://doi.org/10.1186/s13006-020-00313-9>.
- [9] https://www.who.int/health-topics/breastfeeding#tab=tab_1.
- [10] Mashail Basheir Alshammari, Hassan Kasim Haridi, "Prevalence and Determinants of Exclusive Breastfeeding Practice among Mothers of Children Aged 6–24 Months in Hail, Saudi Arabia", *Scientifica*, vol.2021, Article ID 2761213, 10 pages, 2021. <https://doi.org/10.1155/2021/2761213>
- [11] Wolde Melese Ayele, "Exclusive Breastfeeding and Normative Belief among Rural Mothers in Ethiopia, 2019: A Cross-Sectional Survey Embedded with Qualitative Design", *Obstetrics and Gynecology International*, vol.2021, Article ID 5587790, 8 pages, 2021. <https://doi.org/10.1155/2021/5587790>.
- [12] <https://www.who.int/news/item/27-05-2020-countries-failing-to-stop-harmful-marketing-of-breast-milk-substitutes-warn-who-and-unicef>.

Author Profile



Dr. Ashok Kumar Dhanwal, PhD in Nursing.



Maitri Chaudhuri, Principal, Nurses' Training Institute, Agartala Government Medical College and Govinda Ballav Panth Hospital, Agartala, West Tripura