

1-1-2019

## Study to assess the prevalence of breakfast skipping and its associated factors among nursing students in selected college, Mangaluru

Derina Benny Ms

*Father Muller College of Nursing, Mangaluru*

Anu Varghese Ms

*Father Muller College of Nursing, Mangaluru*

Ashly Susan Baby Ms

*Father Muller College of Nursing, Mangaluru*

Aishwarya Roy Ms

*Father Muller College of Nursing, Mangaluru*

Follow this and additional works at: <https://impressions.manipal.edu/mjnhs>



Part of the [Nursing Commons](#)

---

### Recommended Citation

Benny, Derina Ms; Varghese, Anu Ms; Baby, Ashly Susan Ms; and Roy, Aishwarya Ms (2019) "Study to assess the prevalence of breakfast skipping and its associated factors among nursing students in selected college, Mangaluru," *Manipal Journal of Nursing and Health Sciences*: Vol. 5: Iss. 1, . Available at: <https://impressions.manipal.edu/mjnhs/vol5/iss1/8>

This Original Research is brought to you for free and open access by the MAHE Journals at Impressions@MAHE. It has been accepted for inclusion in Manipal Journal of Nursing and Health Sciences by an authorized editor of Impressions@MAHE. For more information, please contact [impressions@manipal.edu](mailto:impressions@manipal.edu).

# Study to assess the prevalence of breakfast skipping and its associated factors among nursing students in selected college, Mangaluru

Derina Benny, Anu Varghese, Ashly Susan Baby, Aishwarya Roy, Brigit A P, Sr Deepa Peter, Precilla D'Silva\*

Email: precilladsilva25@fathermuller.in

## Abstract

**Introduction:** Nowadays breakfast skipping is a tradition in the adolescent group. Breakfast actually means breaking the fast over the night. One of the most important meals which is required for a normal growth is breakfast. If we fail to have breakfast it can lead to the poor concentration, obesity, high blood pressure, irritability, fatigue, etc. **Objectives:** The objective of the study was to identify the prevalence among nursing students in relation to their breakfast skipping pattern and find out the factors associated with it. **Methods:** The approach used was a descriptive survey design. The sample comprised of 349 students. The sample was selected by a purposive sampling technique. The data was collected by administering the baseline pro forma and a checklist was analyzed using descriptive statistics and inferential statistics. **Results:** The prevalence of breakfast skipping was found in 51% of the sample. This showed that the half of the samples were skipping breakfast.

**Key words:** Adolescent, breakfast, breakfast skipping tradition, important meals, prevalence skipping breakfast, skipping breakfast pattern

## Introduction

Skipping breakfast is very common and popular in children and adolescent age group. Studies showed that breakfast which is considered as an important meal is beneficial for the growth and cognition (Benitez, 2005). Though supplementary nutrition is provided for the entire day through other meals, it cannot replace breakfast requirements. The concentration of cholesterol level and fat is higher among breakfast skippers in comparison to breakfast consumers. It is

**Derina Benny<sup>1</sup>, Anu Varghese<sup>1</sup>, Ashly Susan Baby<sup>1</sup>, Aishwarya Roy<sup>1</sup>, Brigit A P (Sr Deepa Peter)<sup>2</sup>, Precilla D'Silva<sup>3</sup>**

1. BSc Nursing Students, Father Muller College of Nursing, Mangaluru

2. Assistant Professor, Dept of OBG Nursing, Father Muller College of Nursing, Mangaluru

3. Lecturer, Dept of OBG Nursing, Father Muller College of Nursing, Mangaluru

Manuscript received: 31 May 2018

Revision accepted: 15 Dec 2018

\*Corresponding Author

also proven that skipping breakfast will have a very serious effect on intellectual ability (Shaw, 2010). Just as a machine requires fuel, in the same manner the body also requires breakfast to start the day. In the absence of which the day may end up with inability to concentrate, irritation, decreased concentration of sugar level and craving for biscuits or chocolates. Skipping breakfast means poorer performance in schoolchildren, a greater risk of accidents when driving, and a lack of efficiency and concentration at work (Knapton, 2017). Skipping breakfast has health associated risks like obesity, increased sugar level deposition and excess deposition of fatty acids. The new study conducted at Harvard concluded that among the health care professionals 27% of the men skipped breakfast. They had a greater risk to develop the heart attack or die due to coronary heart disease (Walton, 2013).

Breakfast is an essential component of every person's day-to-day life because it serves as the first meal of the day. Regular breakfast consumption is good for the

**How to cite this article:** Benny, D., Varghese, A., Baby, A.S., Roy, A., Brigit, A.P., & D'Silva, P. (2019). Study to assess the prevalence of breakfast skipping and its associated factors among nursing students in selected college, Mangaluru. *Manipal Journal of Nursing and Health Sciences*, 5(1), 37-41.

growth and development, intellectual improvement and performance for both the children and the adults (Mogre, Atibilla, & Kandoh, 2013).

A cross sectional study on factors associated with skipping breakfast was conducted among 6,038 Mongolian resident medical students in China using a self-answerable questionnaire in 2011. The objective was to determine the prevalence of skipping breakfast and associated causes. The analyzed results showed that 28.9% were skipping breakfast and its relation to lifestyle habits among males was 41.7% and among females it was 23.5%. The prevalence predicted that 54.4% of the fourth year male students skipped breakfast in comparison to 49.7% of the second year male students. It was also observed that 30% of the second, third and fourth year skipped breakfast in comparison to the first and the last year students. Students who were consuming breakfast had good self-perception compared to the bad self-perception (81.4% vs 51.2%). Also, the quality of sleep was significantly higher among good self-perception students (75.8% vs 57.9%). Also, in association with breakfast consumption, the monthly expenses had also been negligible (Kral, Whiteford, Heo, & Faith, 2011).

A cross sectional study was conducted to test the effects of consumption of breakfast, omitting pattern and energy intake based on the ratings given for appetite among eight to ten year old school children in Philadelphia. The test was performed two times by introducing a compulsory breakfast or no breakfast. Twenty-one children participated as subjects in these two test visits. Lunch was also served during these visits. The results revealed that there was a significant effect with breakfast skipping ( $p = .04$ ), which was associated with intake of caloric requirement. The difference of 362 calories was observed on the days in which regular breakfast was skipped. The subjects also verbalized that they felt more hungry and lethargic when regular breakfast was not served and used to consume more food during/before the lunch ( $p < .001$ ). The researcher concluded that lack of breakfast affected children's appetite ratings but not their energy intake at subsequent meals (Moy, Johari, Ismail, Mahad, Tie, & Wan Ismail, 2009).

## Materials and methods

A descriptive survey was conducted in a selected college at Mangaluru. Eligibility criteria for inclusion included nursing students studying in I, II, III, and IV BSc and I-year and II-year PBBSc students. The total population of students comprised of 349 and the purposive sampling technique method was used. Information was collected by administering a checklist to the subjects. The content validity was obtained by administering the checklist to nine experts from nursing and related fields. The checklist comprised of 15 questions. The internal consistency was checked using Cronbach's alpha and the tool was found reliable ( $r=0.98$ ). The final tool had Part I: Baseline pro forma that contained 12 items, and Part II: Checklist on prevalence of breakfast skipping that consisted of 15 factors. The items were divided into three main content areas; time, work and personal. Permission to conduct the study was obtained from the Institutional Ethics Committee.

## Results

A master data sheet was prepared and the coded data was entered. SPSS-16 version was used to analyze the coded data. The frequency and percentages of the baseline variables were analyzed. Chi-Square test was used to find the association.

The study results were organized as follows:

### Section 1: Baseline pro forma

The purposive sampling method was used and 349 students from a selected Mangaluru college were selected for the study. The baseline pro forma included variables such as age, gender, marital status, qualification, religion, type of family, type of diet, accommodation and most skipping meals.

Table 1:  
*Frequency and Percentage Distribution of Subjects According to Their Baseline Characteristics*

N=349		
Variables	Frequency (f)	Percentage (%)
<b>Age (in years)</b>		
18-19	149	43
20-21	112	32
22-23	33	9
>24	55	16
<b>Year of course</b>		
I year Bsc Nursing	96	28
II year Bsc Nursing	80	23

Variables	Frequency (f)	Percentage (%)
<b>Age (in years)</b>		
III year Bsc Nursing	96	28
IV year Bsc Nursing	67	19
I year PBBSc Nursing	20	6
II year PBBSc Nursing	38	11
<b>Gender</b>		
Female	348	99.71
Male	1	0.28
<b>Religion</b>		
Hindu	10	3
Muslim	1	0.28
Christian	338	97
<b>Marital status</b>		
Married	5	1.43
Unmarried	344	99
<b>Type of family</b>		
Extended	10	3
Joint	20	6
Nuclear	319	91.4
<b>Diet</b>		
Mixed	315	90.25
Non-vegetarian	29	8.3
Vegetarian	5	1.43
<b>Accommodation</b>		
Home	26	7.44
Hostel	323	93
<b>Do you skip any meals?</b>		
Yes	269	77.07
No	80	23
<b>Frequency of skipping meal per week</b>		
0	87	25
1	115	33
2	70	20
3	46	13
4	17	5
5	6	2
6	5	1.43
7	3	1
<b>Type of meals skipped</b>		
Breakfast	180	51
Lunch	97	28
Dinner	67	19.19
None	5	1.43

Section II: Assessment of factors affecting breakfast skipping

Table 2:

Assessment of Factors Affecting Breakfast Skipping among the Nursing Students

Sl No	Factors	Yes		No	
		f	%	f	%
1	Lack of time	95	53	85	47
2	Early breakfast	92	51	88	49
3	Lack of sleep	71	39	109	61
4	Early timings	132	73	48	27
5	Not interested	43	24	137	76
6	More oily content	76	42	104	58
7	Increased body weight	38	21	142	79
8	Not my preference	81	45	99	55
9	Not hygienic	48	27	132	73
10	Lack of variety foods	91	51	153	85
11	Uncooked food	74	41	106	59
12	Junk food	17	9	163	91
13	Canteen food	48	27	132	73
14	Family customs	27	15	153	85
15	Like other supplements	115	64	65	36

N=180

Table 2 reveals that the major factors contributing for the incidence of breakfast skipping are having breakfast early morning (73%), use of other snacks or supplements (64%), lack of time (53%), early timing of breakfast and lack of variety of foods (51%).

Table 3 shows that the computed p-value of breakfast skipping and the selected baseline variables like age ( $p = .021$ ), year of course ( $p = .001$ ) and accommodation ( $p = .001$ ) is less than .05. Thus, it is inferred as there is significant association of breakfast skipping and the selected variables of age, year of course and accommodation. Thus, the research hypothesis is accepted and the null hypothesis is rejected. Other variables like gender ( $p = .246$ ), religion ( $p = .454$ ), marital status ( $p = .902$ ), type of diet ( $p = .576$ ) and type of family ( $p = .897$ ) are more than .05 p-value. Hence, research hypothesis is rejected and the null hypothesis is accepted.

Table:  
Association of Breakfast Skipping Factors and Selected Baseline Variables

Variables	Breakfast skipping Factors		$\chi^2$ Value	P Value
	<Median	>Median		
N=180				
<b>Age</b>				
18-19	46	28	9.743	.021
20-21	26	42		
22-23	8	11		
>24	7	12		
<b>Year of course</b>				
I year BSc nursing	3	5	29.304	.001
II year BSc nursing	7	10		
III year BSc nursing	14	35		
IV year BSc nursing	9	17		
I year PBBSc nursing	35	8		
II year PBBSc nursing	19	18		
<b>Gender</b>				
Female	86	93	1.075	.300
Male	1	0		
<b>Religion</b>				
Christian	3	2	1.369	.504
Hindu	83	91		
Muslim	1	0		
<b>Marital Status</b>				
Married	2	0	2.162	.141
Unmarried	85	93		
<b>Type of family</b>				
Extended	3	2	0.598	.897
Joint	5	7		
Nuclear	79	84		
<b>Type of diet</b>				
Mixed	77	81	0.294	.961
Non-veg	9	10		
Veg	1	2		
<b>Accommodation</b>				
Home	16	1	15.773	.001
Hostel	71	92		
<b>Skipping Meal</b>				
Breakfast	87	93		

T p<.05

\*Significant

## Discussion

Majority of the subjects (48.1%) belonged to the age of 18-19 years old. Most of the subjects were females (99%). Majority of the subjects (27.50%) belonged to the I-year and the III-year BSc (N). Majority of the subjects (96.56%) belonged to Christians, and the rest (2.8%) belonged to Hindus, and (0.228%) belonged to Muslims religion. Majority of the subjects (98.56%) were unmarried. Most of the subjects (91.40%) belonged to the nuclear family, and the rest (5.73%) belonged to the joint family and (2.86%) of extended family. Most of the subjects (90.25%) consumed a mixed diet. Most of the subjects (92.55%) stayed in the hostel. Majority of the subjects (77.67%) skipped breakfast. Majority of the subjects (32.66%) skipped breakfast at least once a week. Majority of the subjects (51%) were breakfast skippers.

Comparison with the findings of the study conducted among the nursing students showed that the maximum score is 15. Around 51% of the samples were breakfast skippers and other, (28%) were lunch skippers, (19.19%) were dinner skippers and (1.43%) were not skipping any of the meals. Chi-square test was used to identify the association of the factors affecting breakfast skipping. The present study also revealed that there was a significant association in the areas such as age ( $p=.021$ ), year of course ( $p=.001$ ) and accommodation ( $p=.001$ ).

To support these findings a study was conducted among 11-15 years adolescent group to find the prevalence and lifestyle factors which were responsible for breakfast skipping among the Lebanese regions. The prevalence varied between 8.4% and 42.8%. In this study, girls skipped breakfast more commonly than boys. The result revealed that 29.4% skipped breakfast due to lack of sleep (i.e. less than 6 hours per day) and 25% skipped due to overweight (El-Chami, Sacre, & Matta, 2017).

Hence, the study revealed that, there was poor knowledge regarding the importance of breakfast and health problems due to the skipping of breakfast.

## Conclusion

The present study concluded that breakfast skipping is common among undergraduate nursing students

who are the part of the health care industry and few of the baseline variables showed the association with regard to this. To reduce the occurrence of breakfast skipping among the youngsters we need to educate them regarding the healthy practices and its relation in maintaining normal health.

Sources of support: None

Conflict of interest: None declared

Source of support in form of grants: None

## References

- Benitez, D. (2005). The Importance of Breakfast in Children and Adolescents. (*Unpublished M S dissertation submitted to Family and Consumer Sciences*). Retrieved from: <http://www.csun.edu/~amarenco/Fcs%20380/diana%20benitez.pdf>. Doi: 10.3945/ajcn.110.000505.
- El-Chami, M., Sacre, Y., & Matta, J. (2017). The prevalence of breakfast skipping and its association with lifestyle factors and weight in 11-15 years' adolescents from selected Lebanese regions. *Occupational Medicine and Health Affairs*, 5(2), 260. Doi: 10.4172/2329-6879.1000260.
- Knapton, S. (2017). Breakfast like a king, lunch like a prince, dine like a pauper. (Web log post). Retrieved from: <http://www.michaelvanstraten.com/factsheets/Breakfast.pdf>.
- Kral, T. V., Whiteford, M. L., Heo, M., & Faith, S. M. (2011). Effects of eating breakfast compared with skipping breakfast on ratings of appetite and intake at subsequent meals in 8- to 10-y-old children. *The American Journal of Clinical Nutrition*, 93(2), 284- 91.
- Mogre, V., Atibilla, J.A., & Kandoh, N. A. B. (2013). Association between breakfast skipping and adiposity status among civil servants in the Tamale metropolis. *Journal of Medical and Biomedical Sciences*, 2(3), 1-7. Doi: <http://dx.doi.org/10.4314/jmbs.v2i3.1>
- Moy, F.M., Johari, S., Ismail, Y., Mahad, R., Tie, F.H., & Wan Ismail, W.M.A. (2009). Breakfast skipping and its associated factors among Undergraduates in Public University in Kuala Lumpur. *Malaysian Journal of Nutrition*, 15(2), 165 – 74.
- Shaw, M. E. (2010). Adolescent breakfast skipping: An Australian study. *Journal of winter*, 33(132), 851-62.
- Walton, G. A. (2013). Why is skipping breakfast so bad for our heart health? (Web log post). Retrieved from: <https://www.forbes.com/sites/alicegwalton/2013/07/23/why-is-skipping-breakfast-so-bad-for-our-heart-health/#36f4d5bb2c01>.