

A study to assess knowledge and self-reported practice regarding food wastage at home among housewife of sangli, Miraj, Kupwad corporation area

Sunil M Kulkarni^{1,*}, Manisha S Kulkarni², Alka D. Gore³

¹Associate Professor, ²Clinical Instructor, ³Associate Professor Statistician, ¹Dept. Community Health Nursing, ²Dept. Child Health Nursing, ¹⁻³BVDU, Medical College and Hospital, Sangli, Maharashtra, India

***Corresponding Author: Sunil M Kulkarni**

Email: sunilmalharkulkarni@gmail.com

Abstract

Introduction: Nourishment wastage in India is going on at each dimension; from reaping, transporting, handling, bundling and expending. Weddings, occasions, eateries, lodgings and houses are a noteworthy wellspring of cooked food. A study was conducted on "A study to assess knowledge and self-reported practice regarding food wastage at home among housewives. The objectives were 1. To assess knowledge of self-reported practices regarding food wastage at home. 2. To find out the association between knowledge self-reported practice on food wastage at home with socio demo-graphic variables.

Materials and Methods: A descriptive survey research cross-sectional design was used. 100 housewives were selected by using non-probability, convenient sampling method. The tool consists of Section-I: includes the demographic data and Section-II consists of the three points rating scale knowledge and self-reported practices regarding food wastage. The reliability of the tool was done by using a split half method and the result was found to be >0.7. A pilot study conducted on 12 samples to check, the feasibility and practicability of the statement. Chi-square inferential statistical test was used to find out the association.

Results: There was a significant association between the knowledge and self-reputed practices to score with socio demo-graphic variables as calculated value 'P'-value was <0.00001.

Conclusion: Awareness among housewives is the key to avoid food wastage at home.

Keywords: Food wastage, Assess, Housewives, Knowledge.

Introduction

As indicated by sustenance and agribusiness association (Food Agricultural Organization) of the United-Nation, around 33% of the nourishment created for the human utilization, which adds up to 1.3 billion tons, get lost or squandered. The Primary driver of nourishment wastage by housewives are the absence of suitable arranging, buy and planning of an excess of sustenance and blunders in modern preparing and staying aware of nourishment arrangements, and buyer behavior.¹

Nourishment wastage in India is going on at each dimension; from reaping, transporting, handling, bundling and expending. Weddings, occasions, eateries, lodgings and houses are a noteworthy wellspring of cooked food.²

Sustenance wastage can happen by different reasons as pursues: 1) Housewives or members get ready dinner more than the need of their relatives. 2) Housewives having low information about self-announced works on with respect to nourishment wastage. 3) The obtaining and possible transfer of more nourishment than is expended at the family level. 4) Food wastage because of inadequate storerooms. 5) Food wastage because of spillage amid washing, stripping or slug. 6) In schools sustenance misfortune because of nonattendance of requesting frameworks for school suppers prompting kitchens cooking for obscure all out no. of students (optional). Understudies are not ravenous by lunchtime.³

Need for the study

The housewives have low learning and about self-announced practices among in regards to nourishment squander. So with this examination. We will survey learning

and self-revealed works on in regards to sustenance wastage at home and their aversion and ready to know their insight whether poor, great, normal or nothing.⁴

As per nourishment sustenance wastage and agribusiness association (FAO) of the UN, roughly 33% of the nourishment created for the human utilization, which adds up to 1.3 billion tons, get lost or squandered. The fundamental driver of nourishment wastage at each dimension from gathering, transporting, handling, bundling and devouring. Weddings, occasions, eateries, lodgings and houses are a noteworthy hotspot for sustenance wastage of cooked food.¹

India wastes as much food as the United Kingdom consumes. All the social functions and social joints in India (especially the northern and central parts), for instance, weddings, canteens, hotels, social and family functions, households, spew out so much food⁵

India wastes Rs 244 crore worth of food a day. India's rank in the global hunger index is 100 among 119 countries.⁶

According To Hindustan Times, around 67 million tonnes of food is wasted in India every year, which has a value of around Rs 92,000 crore. And it's enough to feed all of Bihar for a year.⁷

World food day 2018: one of the most important action plans for world food day is to avoid food wastage. The day is observed worldwide on 16 October. Here are five easy and practical steps to avoid food wastage at home.

1. Get creative in the kitchen. 2. Re-use leftovers wherever possible. 3. Adopt a sustainable diet. 4. Shop realistically. 5. Keep track of expiry and 'use by' dates.⁸

So the analysts felt need an examination regarding this matter in this scenario.

Review of literature

Food wastage is oldest problem. It is multifactor like social, economical, cultural and table manners. Following studies give brief information about trends in food wastage.

A study conducted on ‘Identifying motivations and barriers to minimizing household food waste’. The author stated two core categories of motives to minimize household food waste were identified: (1) waste concerns and (2) doing the ‘right’ thing. Findings thus reveal potentially conflicting personal goals which may hinder existing food waste reduction attempts.⁹

A study on ‘Are the attitudes and practices of foodservice managers, catering personnel and students contributing to excessive food wastage at Stellenbosch University?’ Subjects: Six foodservice managers, 63 catering personnel and 517 students participated in the study. Results showed that the factors contributing to wastage were the booking system, menus and serving style, meal plan stipulating the serving of dessert and serving of a large starch portion.¹⁰

A study on ‘Household Food Waste Prevention in Malaysia: An Issue Processes Model Perspective’. Thus, the goal of the study is to provide the basic information of knowledge and involvement level, and their interaction in food waste prevention among households in Malaysia. The results supported the hypotheses that the level of knowledge has a positive impact on food waste behavior only if the household’s involvement is high and vice versa.¹¹

Wasted Food

U.S. Consumers’ Reported awareness, Attitudes, and behaviors. The survey found widespread (self-reported) awareness of wasted food as an issue, efforts to reduce it, and knowledge about how to do so, plus moderately frequent performance of waste-reducing behaviors. The most common reasons given for discarding food were concern about food-borne illness and a desire to eat only the freshest food. In some cases, there were modest differences based on age, parental status, and income, but no differences were found by race, education, rural/urban residence or other demographic factors.¹²

Materials and Methods

Research approach was Quantitative, descriptive survey and research design was

Descriptive survey design (cross-sectional design). A research variable under study was knowledge and self-reported practices on prevention of food wastage. The study had conducted at Sangli, Miraj, Kupwad corporation area. The non-probability – convenient sampling method was

selected for sample selection. Sample Size was calculated by using power analysis and the sample size was 100. Research tool included, Section I- socio demographic variables and Section II – Three- point rating scale(sometimes, always and never with 0, 1 and 2 score respectively.) on knowledge and self- reported practices on food wastage.

Data collection method considered permission obtained from concerned authorities and purpose of the study was explained and consent was taken from the subject, pre-test knowledge of the housewives will be assessing using structured questionnaires and on the same day self-repoted practices administered to them and the post- test will be conducted using the structured questionnaires.

Data analyzed by using frequency, percentage, mean, standard deviation as descriptive analysis and inferential statistics included the chi-square test to find the association.

The content approval of the apparatus was finished by gathering of the master of therapeutic careful, paediatric, mental, and network wellbeing nursing, division on basic assertion a couple of expansion and cancellation were made in the survey. IRC of BVDU, College of Nursing approved this proposal.

Reliability done in this examination the unwavering quality of the poll was dictated by the organization of the inquiries to 12 tests on 15/1/2019 at Kupwad. The Split-half technique was utilized for unwavering quality. The dependability coefficient was 0.7, henceforth the poll was observed to be solid.

Pilot contemplate was done to survey the possibility of the examination for a measurable investigation earlier regulatory consent was acquired from boss wellbeing official officer of Sangli, Miraj, Kupwad Corporation Area. The examination was directed on 12 housewives on 19/1/2019 at Sangli, Miraj and Kupwad Corporation Area. It showed that the study was feasible. In view of targets of the investigation, Frequency rate, Mean and standard deviation were determined. Chi- square test is connected to check the relationship between various statistic factors and information. The investigation result will be distributed in the nursing conference, workshop and journals.

Analysis

Organization of data

1. Area I-Frequency and percentage distribution of sample according to socio-demographic variable.
2. Area II –Frequency and percentage distribution of sample according to knowledge and self-reported practices rating score.
3. Segment III-Distribution of subjects as per the level of knowledge and self-repoted practices.
4. Segment IV-Association between knowledge and self-reported practices rating score with demographic variable.

Table 1: Frequency and percentage distribution of sample according to socio-demographic variable. n = 100

S. No.	Variables	Frequency	Percentage
1	Age		
	• 21-30	37	37%
	• 31-40	46	46%
	• 41-50	17	17%
2	No. of Family members in the house		
	• 2	10	10%
	• 3	50	50%
	• Above 3	40	40%
3	No. of Children In House		
	• 1	53	53%
	• 2	35	35%
	• Above 2	12	12%
4	Income Per Month		
	• Less than Rs.10,000	41	41%
	• Rs.10,001- Rs.20,000	38	38%
	• Above Rs.20,000	21	21%

Table 2: Frequency and percentage distribution of sample according to knowledge and self-reported practices rating score. n=100

S. No	Self-repoted practices on food wastage	Score
1	How often do you purchase grocery weekly?	62
2	Do you purchase such food items which decay faster?	93
3	Do you purchase such a food material which are available on offer?	111
4	While shopping for grocery products do you purchase extra food items for children?	118
5	Do you tally you are using food items?	92
6	Are there any leftovers daily?	82
7	Do you cook food more than your requirement?	90
8	Do you make the list before grocery shopping?	75
9	Do you throw away then daily leftovers?	101
10	Do you reuse the daily leftovers?	71
11	Do you properly utilize leftovers?	143
12	Do you follow any specific procedure to utilize leftovers in your family?	83
13	Do you think a proper amount of cook food will help to avoid wastage of leftovers?	144
14	Do you prefer proper planning before shopping for groceries?	65
15	Do you daily observe leftovers in your family?	105
16	Do you prefer proper reuse and utilization of daily leftovers?	136
17	Do you try to practice reuse of daily leftovers rather wasting them?	105
18	By choosing the proper amount of groceries it would be helpful to avoid wastage have you tried it?	83
19	Proper planning and proper shopping will help you to avoid food to get wastage have you tried it?	108
20	Do you think the proper distribution of leftovers will help you to reuse it?	136

Table 3: Frequency & percentage distribution of samples according to the level of knowledge and self practices score. N= 100

S. no.	Level of knowledge	Grading	Frequency	Percentage (%)
1.	Poor	0-13	36	36%
2.	Average	14-26	31	31%
3.	Good	27-40	33	33%

Table 4: Association between Knowledge and self –reported practices with demographic Variables n=100

S. No	Variables	Level Of Knowledge			No. of Sample In	Chi square calculated value	P Value	Association
		Poor	Average	Good				
1	Age							
	21-31	15	11	11	37	10.9384	0.027265	Significant
	31-40	20	10	16	46			
	41-50	1	10	6	17			
2	Family Members In House							
	2	1	3	6	10	12.274	0.015426	Significant
	3	15	14	21	50			
	Above 3	20	14	6	40			
3	No of Children In House							
	1	18	22	13	53	10.0886	0.038962	significant
	2	16	6	13	35			
	Above 2	2	3	7	12			
4	Family Income Per Month							
	Less Than Rs.10,000	20	13	8	41	15.1069	0.004485	significant
	Rs.10,000-Rs.20,000	15	8	14	37			
	Above Rs.20,000	1	10	11	22			

Discussion, implication, recommendations and conclusion

Discussion

This part manages the outline and talk of discoveries of the examination, its suggestion to nursing, constraint and proposal for further investigation.

In the present investigation, table no.1: discoveries identified with statistic factors demonstrates that examples were comprised of housewives matured under 21 to 30 years (37%), 40% of age bunch between 31 to 40 years and 17% between 41 to 50 years. If there should arise an occurrence of relatives in house, it was discovered that 10% of housewives were having 3 individuals and 40% of housewives having over 3 relatives in house. If there should arise an occurrence of a number of youngsters' in the house, it was discovered that 53% of housewives were having 2 kids and 12% of housewives were having multiple kids in the house. If there should be an occurrence of family pay every month, it was discovered that 41% of housewives were having rupees under 10,000 family pay for each month and 21% of housewives were having family pay more than rupees 20,000.

The above examination discoveries is bolstered by comparable investigation directed by Violeta Stancu AARHUS college in Denmark for example respondents were in the age bunches '35 to 49", "50 to 64" and "65yrs old or over" were less inclined to be in the "high waste bunch" contrasted with those in the age assemble "18 to 34" years old. In the family measure were 1 part, 2 individuals, at least 3 individuals in the house. If there should be an occurrence of 82% of kids, something like one youngster under 16yrs old and other 9% kids under 26 years in the family happens under this study.⁴

In the present investigation, table no.2: circulation of information score as indicated by inquiries demonstrates that structure survey was utilized to gather the information. The absolute score was 20. It was discovered that 62% of housewives they buy basic supply week by week and over 100% (144) of housewives they figure appropriate measure of prepared nourishment will keep away from wastage of scraps.

The above investigation of finding is upheld by comparative examination led by Violeta Stancu in AARHUS University in Denmark. It was discovered that 3% of household individuals 90, for shopping for food in 1-2 times each week. Furthermore, a large portion of the 54% family unit individuals was putting away sustenance subsequent to shopping with the appropriate administration of food.⁴

In present examination, table no.3 appropriation of the test as per dimension of learning demonstrates that, Structure survey was utilized to gather information for the conveyance of test as indicated by the dimension of learning (0 to 13), 33% of housewives were having great learning (27 to 40).

The above examination finding is upheld by the comparable investigation led by Luca Falasconi report of farming and sustenance sciences, college of Bologna, Italy. Higher recurrence of family unit sustenance waste and 21 to 58% of housewives go under the lower recurrence of family nourishment waste.⁵

In the present investigation, table no.4: Association between learning score and statistic factors demonstrates that the chi-square test was utilized to discover the relationship between the information score and statistic

factors. Along these lines, there was huge relationship between the learning score and statistic factors.

The above examination finding is upheld by comparable investigation directed by Violeta Stancu in AARHUS University in Denmark. There was a huge relationship between learning score and socio-statistic factors, for example, age, family unit individuals, youngsters under age in years, Income of family.⁴

Nursing Implication

The finding of the investigation has suggestions for nursing work on, nursing training, nursing organizations and nursing research.

Nursing Instruction

Nursing instruction is quickly creating in India and attendants from our nation can be found in all aspects of the world.

There are essentially four included as pursues Medical attendant Educator

Medical attendant teacher will utilize discoveries of avoidance of nourishment wastage examine in educating and learning exercises for understudy, family and network.

Nursing Education

May incorporate into her educational programs straight forwardly or in a roundabout way. Attendant analyst disseminates discoveries of the examination to the expert and all-inclusive community by utilizing different techniques and media. For example, present and distribute the report. Report look into studies, utilization of hardware of discoveries might be used.

Medical caretaker Administration

Medical caretaker organization will build up the way of life and practice among the staff and others in regards to avoidance of sustenance wastage by different strategies. Occasionally arrange in administration instruction or proceeding with training on sound sustenance rehearses particularly of nourishment wastage.

Nursing practice

Staff medical attendant or understudy attendant will take suitable consideration for the anticipation of sustenance wastage while serving the nourishment to the patient. They can compose wellbeing instruction on the same point for patient relatives, understudies and others in different settings of social insurance. For example Emergency clinics, schools, ventures, eateries, inns, etc.

5. Nursing Research:- Nursing research is a basic part of nursing instruction as it lifts up the callings, grows new nursing standards and upgrade assortment of nursing information. Research concentrates might be directed constantly on the commonness of sustenance wastage which adds to the nursing group of information dependent on the investigation results. The housewives ought to be

taught about the counteractive action of nourishment wastage. The present investigation causes the scientist to audit the discoveries and furthermore apply this learning practically speaking.

Limitations

An examination was done inside two weeks of the time of a chosen zone of Sangli, Miraj, Kupwad Corporation Area, who were accessible at the season of information accumulation. Housewives were accessible at the season of information gathering for the most part in the first part of the day time frame.

Recommendation

Conduct teaching activities on prevention of food wastage at home for housewives is the key to solve this problem.

Conclusion

Present study gave information about self-reported practices regarding food waste. Housewives are a key person in the prevention of food wastage at home. Data collection process gave indirectly awareness on ideal practices to prevent food wastage at home. Still many aspects need to study for prevention and utilization of food wastage at different settings like hotels, mess and social functions. Health education is cheap and important action in avoiding food wastage.

Conflict of Interest: None.

References

1. Brooke Dahl, et al, United nation of environment, published on 30 Sep 2018; <http://en.m.wikipedia.org/wiki/food> (2016-6-9)
2. Hancy Thacker. history of food wastage in India. [http://theCSRgeneral.in/food wastage in India.](http://theCSRgeneral.in/food-wastage-in-india)
3. Lawrence.oM Beng. Assessing public attitudes and behavior to household food management. Sustainability 2009, published in.3 Sept 2009; page no.1556-5122; [www.mdpi.com/ journal/sustainability](http://www.mdpi.com/journal/sustainability).
4. Violeta Stancu. Consumer food waste in Denmark; *J food and agriculture* published in April 2018; URL–e-mail.dca@au.dk; web: www.dca.au.dk.
5. Krishna p. India wastes as much as United Nation consumes. Business World. 2019 March 29.
6. Chauhan D. India wastes Rs. 244 crore worth of food a day. Economic Times. 2018 January 08
7. Around 67 million tonnes of food is wasted in Indian every year. Hindustan Times. 2016 Sep. 16.
8. World food a day. [ndtv food desk](http://ndtv.com) | updated: October 16, 2018 09:37 IST
9. Rowe EG. Joseph DC. Spacks P. Identifying motivations and barriers to minimising household food waste'.UK: University of Sussex. School of Psychology; 13.December2014.
10. Maraisa ML Koena N. Smita Y, Lotzeb E. 'Are the attitudes and practices of foodservice managers, catering personnel and students contributing to excessive food wastage at Stellenbosch University?' Stellenbosch. South Africa: Stellenbosch University, Stellenbosch:

11. Razzak SA. A study on 'Household Food Waste Prevention in Malaysia: An Issue Processes Model Perspective': South Africa: University of South Florida: 2017 December 25.
12. Nief RA, Spiker ML, Truani PL. Wasted Food: U.S. Consumers' Reported Awareness, Attitudes and Behaviors. PLOS. 2015 January; 10:10

How to cite this article: Kulkarni SM, Kulkarni MS, Gore AD, A study to assess knowledge and self-reported practice regarding food wastage at home among housewife of sangli, Miraj, Kupwad corporation area. *J Paediatr Nurs Sci*, 2019;2(1):13-18