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Dear readers,

Welcome to the May 2024 edition of Nursing Updates. In this edition we search into the theme of International Nurses Day which emphasizes the profound impact nurses have on health care, society, and the economy." Our nurses, Our future- The economic Power of Care".We explore evidence-based practices and thought-provoking research that highlight the economic value of nursing care.We invite you to engage with these insights, share your perspectives and join us in championing the economic empowerment of nursing professionals worldwide

Thank you, all nursing professionals, for your dedication and unwavering commitment to delivering compassionate care and driving economic impact resilience.Together let us pave the way for a future where nursing excellence continues to fuel economic prosperity and transform healthcare systems.

Wishing you an enlightening and enriching reading experiences

HAPPY NURSES DAY TO ALL

With warm regards

Prof. Sreedevi Amma C
Chief Editor
Journal of Nursing Updates

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The Journal of Nursing Updates is a peer reviewed journal in Nursing published from Government College of Nursing, Thiruvananthapuram, Kerala.The main aim of this journal is to provide a platform for sharing knowledge through evidence based publications.This journal is beneficial for professional researchers, academicians,research scholars,nursing students and other nursing professionals including clinical nurses.

Dissemination of evidence based research information and results is cardinal in the era of knowledge explosion and is accomplished through journals and publications.The Journal of Nursing Updates is committed to meet and uphold the standards of ethical behaviour at all stages of its publication process.Currently the journal does not charge for submission, processing or publication of manuscripts.

This journal is envisaged to bring out original research publications, case studies, case reports, health related news and concept papers.

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Functional Status of Stroke Survivors Attending a Tertiary Care Centre, Thiruvananthapuram

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Abstract

Stroke, the second leading cause of death and the third leading cause of disability worldwide. It is rapidly increasing in low-income and middle-income countries, where many face challenges in addressing it. It also stands as the primary cause of long-term functional impairment with severe physical and psychological effects on survivors and their families, making it one of the top three causes of death and premature disability globally. The research titled functional status of stroke survivors attending a Tertiary Care Centre, Thiruvananthapuram was a cress sectional study, conducted among 211 stroke survivors attended Neurology Department of Government Medical College Hospital Thiruvananthapuram. A structured interview schedule consisting of demographic data and clinical data regarding stroke and Barthel index tool was used to assess the functional status of stroke survivors. The study revealed that29.4% have moderate dependency (BI score 61-90), 25.1% have severe dependency (BI score 21-60) and 22.7% have slight dependency (BI score 91-99). The present study demonstrated that there is a statistically significant association between age of stroke survivors, time for initiating treatment and physiotherapy with functional status of stroke survivors. The study also highlights the importance of early detection and management of stroke and also the need for rehabilitation services.

Key words : Functional status,Stroke survivors

INTRODUCTION

Stroke is the second leading cause of death and the third leading cause of disability worldwide and its burden is increasing rapidly in low-income and middle-income countries, many of which are unable to face the challenges it imposes.[1]It is among the top three causes of death and premature disability worldwide. Stroke represents the leading cause of long-term functional impairment with extreme physical and psychological consequences among survivors and their families. Literature shows that over a quarter of stroke patients are below the age of 65. Given the increasing number of strokes globally and the large number of individuals left with disabilities after stroke, eliminating factors that negatively influence the functional status of patients with stroke is of major importance. Therefore, rehabilitation programs for stroke patients mainly aim to improve functional independence needed for the performance of daily activities and to integrate them into community life[2]. The sequelae of stroke vary greatly depending upon the type of stroke, its size and the location of the brain affected as well as the amount of collateral blood flow[3]. Globally 60% of stroke patients develop permanent disabilities and experience limitations in mobility, vision, speech and swallowing function. Literature suggests that natural recovery occurs in 50% of people in the first month with minimal recovery after six months. Visual loss following a stroke can be temporary or permanent and interferes with an individual's ability to perform daily living activities and live independently. It is strongly connected with the success of rehabilitation and can dramatically affect daily functioning[4]. Many studies have addressed the sociodemographic and clinical factors associated with the Functional status of stroke survivors. The present study has been undertaken to assess the functional status and factors associated with the functional status of stroke survivors attending a tertiary care teaching hospital in south Kerala.

METHODOLOGY

The research employed a quantitative approach with a cross-sectional design.The source population consisted of stroke survivors who attended the Neurology Department at Government Medical College Hospital and who met the eligibility criteria. Inclusion criteria encompassed stroke survivors attending the Neurology department of Medical College Hospital, Thiruvananthapuram, who were willing to participate in the study and could comprehend Malayalam. The stroke survivors who were differently abled were excluded from the study. The sample size was 211. Samples that met inclusion criteria were selected consecutively. Tools were an interview schedule comprising socio-demographic and clinical variables, and Barthel Index, for assessing functional independence in activities of daily living. A pilot study using a 10% sample size was conducted after obtaining permission. Formal permissions were acquired, and written informed consent was obtained from willing participants and their relatives. Ethical clearance was obtained, confidentiality of collected data was maintained, and COVID-19 guidelines were strictly adhered to during data collection. Data analysis involved expressing socio-demographic and clinical variables as frequency and percentage, while functional status was expressed as proportion. The association between functional status and socio-demographic/clinical variables was analysed using the chi-square test.

RESULT

Table 1

Sociodemographic characteristics of participants

Variable	*Frequency*	*Percentage*
Age in years		
30-40	7	3.3
40-50	29	13.7
50-60	68	32.2

60-70	81	38.4
70-80	23	10.9
80-90	3	1.4
Gender		
Male	135	64
Female	76	36
Religion		
Hindu	151	71.57
Christian	33	15.64
Muslim	27	12.79
Type of Family		
Nuclear	175	83
Joint	36	17
Domicile		
Rural	197	93.4
Urban	12	5.7
Coastal	2	0.9
Marital Status		
Married	178	84.4
Widow/widower	28	13.3
Divorced	3	1.4
Unmarried	2	0.9
Educational status		
Professional degree	2	0.9
Graduate	6	2.8
Diploma	5	2.4
Higher secondary	14	6.6
High school	93	44.2
Primary school	91	43.1
Occupation		
Govt. Employee	7	3.3
Private employee	25	11.9
Wage labour	80	37.9
Unemployed	99	46.9
Income		
Below Poverty Line	171	81
Above Poverty Line	40	19

Table 1 shows the distribution of socio-demographic variables of the study participants. The age-wise distribution revealed that among the participants majority (38.4%) of stroke survivors were between the age group of 60-70 . Among the participants 64% were males. 71.6% of stroke survivors were Hindus. The study noted that 83% of stroke survivors belonged to nuclear families, while 17% were from joint families. Additionally, 93.4% of survivors resided in rural areas, 5.7% in urban areas, and 0.9% in coastal areas. Regarding marital status, 84.4% were married, 13.3% were widowed, 1.4% were divorced, and 0.9% were unmarried. Educationally, 44.1% had high school education, 43.1% primary school, 6.6% higher secondary, 2.8% graduation, and 2.4% diploma, with only 0.9% holding professional degrees. The distribution of occupational status showed that 46.9% were unemployed, 37.9% were wage labourers, 11.8% were private employees, and 3.2% were government employees. Furthermore, 81% belonged to below-poverty line (BPL) families, and 19% in above-poverty line (APL) families.

Table 2

Clinical characteristics of participants

Variable	*Frequency*	*Percentage*
Type of stroke		
Ischemic stroke	192	91
Haemorrhagic stroke	19	9
Duration of disease		
6-11 month	83	39.3
1-2 year	59	27.9
3-5 year	45	21.3
>5 years	24	11.3
Time for initiating treatment		
Within 6 hours	105	49.8
6-23 hours	52	24.6

1-2 days	38	18
> 2 days	16	7.6
Type of treatment received		
Thrombolytic therapy	64	30.3
Surgery	4	1.9
Medical management and others	143	67.8
Follow up		
Regular	192	91
Irregular	19	9
Physiotherapy services		
Received	110	52
Not received	101	48

Table 2 shows the clinical characteristics of the study participants. The distribution of stroke survivors based on the type of stroke indicated that 91% had ischemic stroke, while 9% had haemorrhagic stroke. Regarding the duration of illness, 39.33% had 6-11 months, 27.96% had 1-2 years, 21.32% had 3-5 years, and 11.37% had over 5 years. Among the sample, 49.8% exhibited arm weakness, 12.8% slurred speech, 12.3% balance problems, 11.8% facial deviation, 3.8% eye weakness, and 9.5% other issues. Regarding the time for initiation of treatment, 49.8% received treatment within 6 hours, 24.6% within 6-23 hours, 18% within 1-2 days, and 7.3% after more than 2 days. Thrombolytic therapy was administered to 30.3% of stroke survivors, while only 1.9% underwent surgery; the remaining 67.8% received other treatments. Moreover, 91% of stroke survivors maintained regular follow-up, with 9% having irregular follow-up. Finally, 52% of survivors depended on physiotherapy, while 48% did not.

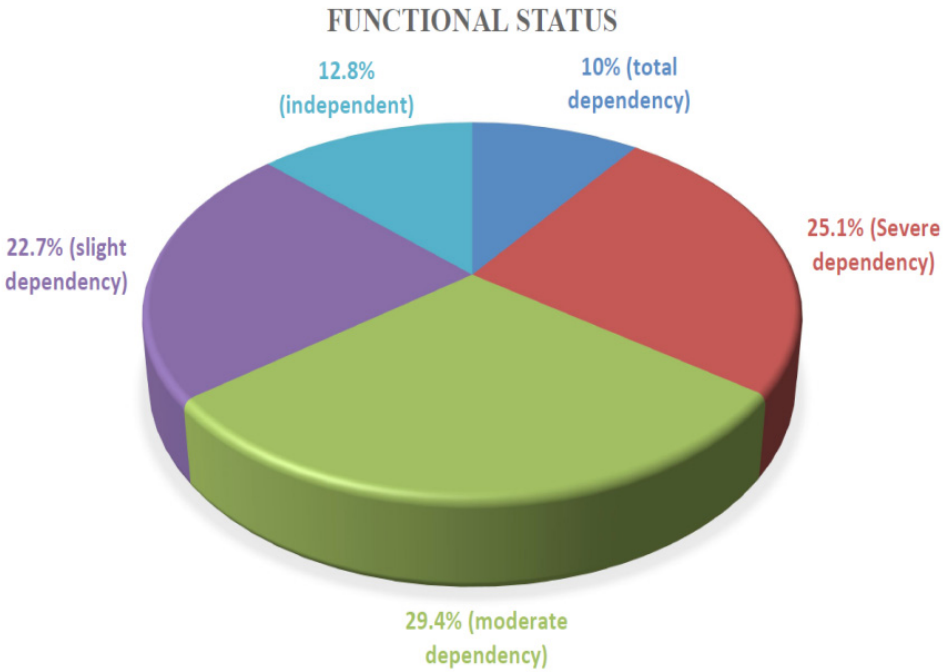

Fig.1 Functional status of stroke survivors

Figure 1 shows that 29.4% of stroke survivors had moderate dependency (score 61-90), 25.1% had severe dependency (score 21-60), 22.7% had slight dependency (score 91-99) and 10% were dependent (score 0-20). 12.8% of them were independent (score 100).

Table 3

Factors associated with Functional status of stroke survivors

Variable	*Functional Status*					
	Total dependency	*Severe dependency*	*Moderate dependency*	*Slight dependency*	*Independent*	*x^2 (p value)*
Age (years)						
< 50	2	6	13	11	4	
50-70	11	41	44	31	22	19.3 (0.014)
>70	8	6	5	6	1	
Gender						
Male	12	36	33	31	23	
Female	9	17	29	17	4	9.2 (0.057)
Income						
APL	6	10	10	11	3	
BPL	15	43	52	37	24	3.2 (0.532)
Type of stroke						
Ischemic	17	46	59	44	25	
Haemorrhagic	4	7	3	4	2	4.9 (0.302)
Duration of disease						
6 -11 month	12	29	17	16	9	
1-2 year	3	11	21	15	9	
3-5year	3	10	15	10	7	15.6 (0.210)
>5years	3	3	9	7	2	
Time for initiating treatment						
Within 6 hours	16	24	25	18	22	
6-23 hours	2	14	23	11	2	
1-2 days	3	9	11	12	3	30.9 (0.002)
>2 days	1	5	3	6	1	
Type of treatment						
Thrombolytic therapy	7	18	18	12	9	
Surgery	1	1	1	1	4	10.6 (0.227)
Others	12	35	43	36	17	
Physiotherapy						
Not Received	7	30	39	19	15	
Received	14	23	23	29	12	9.4 (0.049)

Table 3 showed that there is a significant association between functional status and the age of stroke survivors (x^2 = 19.3, p = .014), the time for initiating treatment (x^2 = 30.9, p = .002), and recieving physiotherapy (x^2 = 9.4, p = .049). However, no statistically significant associations were found between functional status and gender (x^2 = 9.2, p = .057), income (x^2 = 3.2, p = .532), type of stroke (x^2 = 4.9, p = .302), duration of disease (x^2 = 15.6, p = .210), type of treatment received (x^2 = 10.6, p = .227), follow-up (x^2 = 5.5, p = .237)

DISCUSSION

The present study was intended to assess the functional status of stroke survivors attending atertiary care centre, in Thiruvananthapuram. The study showed that the majority of the stroke survivors demonstrated varying levels of dependency, only 12.8% of participants were independent (score 100). The results are also congruent with the study done among stroke survivors living in rural areas and small towns in Poland[6].The study found a significant link between age and functional status in stroke survivors, with younger patients (<70 years) showing improvement after 6 months[7].However, no association was found between functional status and gender, education, or place of residence[8,9]. There was a significant association between functional status and time of treatment initiation, with those treated during off-hours having poorer outcomes. Functional status at 6 months post-stroke was associated with long-term survival, indicating the importance of early interventions. Additionally, there was a significant association between functional status and the need for physiotherapy, with patients showing improvements, particularly within the first 3 months after stroke[10,11,12].

A few limitations obserbed in the study are, that the research primarily concentrated on the functional status of stroke survivors at a specific point in time, potentially overlooking the dynamic nature of recovery and functional changes over time. The study is limited to a single setting, these limitations underscore the need for caution when interpreting and applying the study's results.

CONCLUSION

The findings of this study showed association between various factors and the functional status of stroke survivors and age emerged as a significant determinant, particularly when coupled with early intervention. Additionally, the significant association observed between functional status and the utilization of physiotherapy highlights the role of rehabilitation services in improving functional outcomes among stroke survivors. These findings underscore the multifaceted nature of stroke management, emphasizing the necessity for comprehensive approaches that encompass both early detection and intervention as well as ongoing rehabilitation efforts.

REFERENCE

1. Owolabi M O. Primary Stroke Prevention Worldwide. Lancet Public Health. 2022 Jan. Available from https://pubmed. ncbi.nlm.nih.gov
2. Martin T, Ribeiro J P, Garrett C, Disability and Quality of Life of Stroke Survivors: Evaluation nine months after discharge, Portugal: 2006 Jun.Available from https://pubmed. ncbi. nlm. nih.gov.
3. Mackay J, Mensah G. The Atlas of Heart Disease and Stroke. Geneva; World Health Organization(WHO) : 2004. Available from http://apps.who.int/iris/handle/ 10665/43007
4. Donnan G A, Fisher M, Macleod M, Davis SM. Stroke. Australia; Lancet: 2008 May. Available from https://pubmed.ncbi.nlm.nih.gov

5. Chandran P, Shenoy D, Thavody J, Lailabi MP. Assessment of Quality of Life of Stroke Survivors in a rural area of North Kerala, India. International Journal of Community Medicine and Public Health. 2017 Mar; 4(3):841-846. Available from http://www.ijcmph.com)

6. Jucha R. Stan, Przegl Lek. Functional status and quality of life of stroke survivors living in rural areas and small towns]. 2012;69(3):98-102. Polish. PMID: 22764650.

7. Yoo, Jae Wan et al. "Effects of Age on Long-Term Functional Recovery in Patients with Stroke."Medicina (Kaunas, Lithuania) vol. 56,9 451. 7 Sep. 2020

8. Helbostad, J.L.; Sletvold, O.; Moe-Nilssen, R. Effects of home exercises and group training on functional abilities in home-dwelling older persons with mobility and balance problems: A randomized study. Aging Clin. Exp. Res. 2004, 16, 113–121.

9. López-Espuela, Fidel et al. "Functional Status and Disability in Patients AfterAcute Stroke: A Longitudinal Study." American journal of critical care: anofficial publication, American Association of Critical-Care Nurses vol. 25,2(2016): 144-51. doi:10.4037/ajcc 2016215

10. Almallouhi E, Al Kasab S, Harvey JB, Reardon C, Alawieh A, Girotra T, Aysse P, Turner RD 4th, Holmstedt CA. Impact of Treatment Time on theLong-Term Outcome of Stroke Patients Treated WithMechanicalmThrombectomy. J Stroke Cerebrovasc Dis. 2019 Jan;28(1):185-190.

11. Lothiar Stroke Register, Oxfordshire Community Stroke Proje, Int StrokeTrial, Slot KB, Berge E, Dorman P, Lewis S, Dennis M et al. Impact offunctional status at six months on long term survival in patients withischaemic stroke: prospective cohort studies. British Medical Journal(BMJ). 2008 Feb 16;336:376. doi: 10.1136/bmj.39456.688333.BE

12. Kuliński, W³odzis³aw, and Oktawia Bêbenek. "Evaluation of the effects ofphysical therapy on everyday functioning in stroke patients." Wiadomosci lekarskie (Warsaw, Poland: 1960) vol. 71,8 (2018) 1497-1503

Knowledge and Practice regarding Complementary Feeding among Mothers of Infants attending Tertiary Care Centre, Thiruvananthapuram

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Abstract

Complementary feeding is one of the most important steps towards child development. The lack of adequate knowledge and practice regarding complementary feeding can lead to stunting, malnutrition, infections, delayed growth and development and other related problems. Assessing the knowledge and practice regarding complementary feeding and promoting awareness is essential to prevent these problems. The objectives of the present study were to assess the knowledge and practice regarding complementary feeding among mothers of infants attending a Tertiary Care Center in Thiruvananthapuram to find out the correlation between knowledge regarding complementary feeding among mothers of infants and practice. The study was conducted among 209 mothers admitted in SAT Hospital, Thiruvananthapuram. The research approach used in the study was a quantitative approach and the research design utilized was cross cross-sectional survey. The samples were selected consecutively who met the eligibility criteria. A structured interview schedule was used for data collection. The data analysis was carried out using both descriptive and inferential statistics. The findings of the study revealed that 53.7% of the mothers had good knowledge, 39.9% had average knowledge and 6.4% had poor knowledge regarding complementary feeding. 72.3% of the mothers had good practice, 25.5% had average practice and 2.1% had poor practice. There is a correlation between knowledge and practice significant at the 0.01 level. The study concludes the necessity for improving knowledge among mothers through health education.

Keywords: Knowledge, Practice, Complementary feeding, infants

INTRODUCTION

Complementary feeding is the systemic process of introduction of suitable food at the right time in addition to the mother's milk in order to provide needed nutrients to the baby.[1][1] Weaning is the process by which infant gradually accustoms to foods other than breast milk. Complementary feeding or weaning is essential to start after 6 months of age to ensure optimum growth and prevent malnutrition[2]. Complementary feeding occurs when children receive foods to complement breast milk or infant formula. Ideally it begins at 6 months of age and continues to 24 months or beyond, reflecting the World Health Organizations recommendations for exclusive and continued breastfeeding. In practice, however, in many cases exclusive breastfeeding ends earlier than 6 months and continued breastfeeding ends prior to the 2 years of age. The complementary feeding period occurs during a "window of opportunity" for the prevention of stunting and promotion of optimal growth, health and behavioraldevelopment[3,4]. Complementary foods and beverages and feeding patterns may also affect susceptibility to non-communicable diseases later in life. This is relevant globally, though may be particularly so in middle- and high-income countries. A 2011-2012 nationally representative survey in the United States found that 8.1 percent of children less than 2 years of age were already above the 95th percentile and 7.2 percent were at or above the 97.7th percentile for weight based on their length[5,6,7]. Ensuring that a child's nutritional needs are met during the complementary feeding period requires that the foods introduced are timely, adequate, safe and responsively fed. They should also be properly fed – meaning that meal frequency and feeding methods, such as actively encouraging the child, even during illness, to consume sufficient food using fingers, spoons or self-feeding are suitable for their age. Other important aspects of complementary feeding and foods include attention to food consistency that reflects a child's ability to chew and swallow, adequate meal frequency, energy density and nutrient content, and use of vitamin and mineral supplements or fortified products when necessary[8]. Good nutrition in the first two years of life is crucial. Therefore, to grow and stay healthy, young children need a variety of nutritious foods such as meat, fish, pulses, grains, eggs, fruits and vegetables, as well as breast milk. Foods such as mashed vegetables and chopped meat, eggs or fish should be added to the child's diet as often as possible. However, children's energy and body-building needs are great. It is important that children eat frequently to provide for all their needs[9].

METHODOLOGY

The research approach selected for the study was quantitative. The study was started after obtaining approval from the Scientific Review Committee and Institutional Ethics Review Board. The administrative sanction was obtained from Govt College of Nursing, Thiruvananthapuram and the Department of Paediatric Medicine. Sree Avittom Thirunal hospital Thiruvananthapuram . The study was conducted among 190 mothers of infants attending the Department of Paediatric Medicine. Sree Avittom Thirunal Hospital, Thiruvananthapuram. The samples fulfilling the eligibility criteria were selected consecutively. Written informed consent was obtained from all the participants before data collection. The technique adopted for data collection was a structured interview schedule to assess both knowledge and practice regarding complementary feeding. The researcher collected socio-personal data from all mothers of infants who were selected as samples. Tool 1 consists of two sections, Socio-demographic data it includes age, education, occupation, and age of the child, knowledge regarding Complementary Feeding among mothers of infants including questions regarding general aspects, indications, and complications of complementary feeding, practices of complementary feeding. The maximum score was 10 and the minimum score was zero. The knowledge level is classified as poor, average and good based on the score obtained. A score of less than 5 was given. Poor knowledge: below 50% corresponds to the score<5. Average knowledge: score falling between50-70%, ranging from,5-7. Good knowledge: scores above 70%

indicating scores >7. The technique used for data collection in the present study was an interview. The collected data were tabulated, analysed and interpreted using descriptive and inferential statistics done by Statistical Package for Social Science software 27.

RESULTS

Table 1

Sociodemographic data of the participants, n=190

Variable	*Frequency*	*Percentage*
Age in years		
20-24	81	42.6
25-29	64	33.7
30-34	29	15.3
35-39	16	8.4
Education		
primary	15	7.9
High school	37	19.5
Higher Secondary	66	34.7
Graduate	59	31.1
Post graduate	13	6.8
Occupation		
Home maker	142	74.7
Self employed	19	10
Govt employed	6	3.2
Others	23	12.1
Income		
APL	51	26.8
BPL		139
73.2		
Age of the child		
0-3	43	22.6
3-6	49	25.8
6-9	46	24.2
9-12	52	27.4

Table 1 shows that 42.6% of mothers belonged to the age group of 20- 24years and only 8.4% belonged to the age group of 35-39 years. 34.7% of mother's educational qualification washigher secondary. 31.1% of the mothers were graduated.19.5% of mother's studied up to high school. Majority,74.7% of the mothers were homemakers, 10% were self-employed, 3.2% were government employed. 26.8% of mothers belonged to APL category, 73.2% of mothers belonged to BPL category. Majority (27.4%) had children of ages between 9-12 months.

Figure 1 Knowledge and Practice regarding Complimentary Feeding among Mothers of Under-five

Fig 1 shows that 53.7 % of participants have good knowledge, 40% have average knowledge and 6.3% have poor knowledge regarding complementary feeding. Regarding the practice 72.1% of participants have good, 25.8% have average and 2.1% have poor practice on complementary feeding.

Table 2

Correlation between knowledge and practice

n=190

Knowledge	*Practice*
Person correlation	0.477
Sig(2-tailed)	0.000

The table 2 shows that Pearson correlation coefficient between knowledge and practice is 0.477, indicating a moderate positive correlation. The significance value (Sig 2-tailed) is 0.000, meaning the correlation is highly statistically significant.

DISCUSSION

The present study was conducted to assess the Knowledge and Practice regarding Complementary Feeding among Mothers of Infants attending a Tertiary Care Centre, Thiruvananthapuram. In the present study, most of the participants were in the age group of 20-24(43.1%). This is supported by the study conducted among 422 mothers in Tanzania, where most of the mothers of age group 25-29(40.8%)[10]. In the present study most of the participants having an education of higher secondary level (34.6%) . it is opposed by another study conducted to assess Knowledge and Practice of Complementary Feeding among the mothers of the Child Aged Group 624 Months in Nepal, most of them having an education of primary level (36.7%)[11]. In the present study, most of the participants were home makers (75.5%). In a similar study conducted to assess Knowledge and Practices of Complementary Feeding among Mother's/ Caregivers of Children Age 6 to 23 Months in , Ethiopia were house wives (75.96%) shows similarity to this study[12]. In the present study, the results showed that out of 190 samples,6.4% had poor knowledge, 39.9% had average knowledge, 53.7% had good knowledge, 2.1% had poor practice, 25.5% had average practice, 72.3% had good practice. In a similar study on Knowledge and Practice of Complementary Feeding among the mothers of the Child Aged Group 624 Months, Tanahu District, Nepal,26.6% had inadequate knowledge, whereas 73.4% had adequate knowledge on complementary feeding. Likewise, the study revealed that 51.9% did the right practice, while 48.1% were involved in the wrong practice on complementary feeding[10].

CONCLUSION

The conclusions were made based on the findings of the study. The study conducted among 190 mothers of infants revealed that, 6.4% had poor knowledge, 39.9% had average knowledge, 53.7% had good knowledge, 2.1% had poor practice, 25.5% had average practice, 72.3% had good practice. There was significant correlation between knowledge and practice.

REFERENCES

1. Complementary Feeding - an overview | ScienceDirect Topics [Internet]. [cited 2024 May 22]. Available from: https://www.sciencedirect.com/topics/nursing-and-health-professions/complementary-feeding
2. Complementary feeding - Infant and Young Child Feeding - NCBI Bookshelf [Internet]. [cited 2024 May 22]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK148957/
3. Perez-Escamilla R, Segura-Pérez S, Lott M, on behalf of the RWJF HER Expert Panel on Best Practices for Promoting Healthy Nutrition FP, and Weight Status for Infants and Toddlers from Birth to 24 Months. Feeding Guidelines for Infants and Young Toddlers: A Responsive Parenting Approach. Guidelines for Health Professionals. Duram, NC: Health Eating Research; 2017. Available from: http://healthyeatingresearch.org
4. Global Strategy for Infant and Young Child Feeding. Geneva: World Health Organization; 2003.
5. Clinton HR. 1000 Days to Change the Future: Making Malnutrition History; May 21, 2012. Available from: https://feedthefuture.gov/article/secretary-clinton-video-address-1000-days-event-chicago

6. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, De Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet. 2013;S0140-6736(13)60937-X.

7. Adair LS. How could complementary feeding patterns affect the susceptibility to NCD later in life? Nutrition, Metabolism & Cardiovascular Diseases. 2012;22:765-9.

8. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. JAMA. 2014;311(8):806-81.

9. Key practice, Complementary feeding / UNICEF Uganda [Internet]. [cited 2024 May 22]. Available from: https://www.unicef.org

10. Sichalwe MM, Behera MR, Behera D, Dehury RK, Degge H. Knowledge and practice of complementary feeding among mothers in Dar-es-Salaam, Tanzania: Community-based cross-sectional study. Clin Epidemiol Glob Health. 2023;24:101430.

11. Bastola A, Neupane R, Shrestha M, Panta PP, Thapa K, Bastola K. Knowledge and Practice of Complementary Feeding among the Mothers of the Child Aged Group 6-24 Months, Tanahu District, Nepal. Journal of Nepal Health Research Council. 2021 Apr 23;19(1):14-20. Available from: https://pubmed.ncbi.nlm.nih.gov/33934147

12. Neme K, Keyata EO. Knowledge and Practices of Complementary Feeding Among Mothers/Caregivers of Children Age 6 to 23 Months in Horo Woreda, Horo Guduru Wollega Zone, Oromia Region, Ethiopia. International Journal of Pediatrics. 2018;2018:1-7.

Effectiveness of Play Activities on Attention Span among Slow Learners attending a Tertiary Care Centre

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Abstract

The present study investigated the effectiveness of play activities on attention span among slow learners attending the Institute of Child Health, Kottayam. A quantitative approach with a quasi-experimental pretest-posttest control group design was used for the study. The study was theoretically supported by Imogene King's goal attainment theory. A total of 60 slow learners, 30 each in the control and experimental group were selected using a purposive sampling technique. The data were collected by sociopersonal and clinical data sheet and attention span was assessed by using Modified Mindfulness Attention Awareness – child scale. The experimental group received routine training and play activities, while the control group received routine training only. Post post-test was conducted on the 28th day for both the control and experimental groups. The results revealed that selected play activities had a significant effect in improving attention span among slow learners at 0.05 level.

Keywords: Slow learners, attention span and selected play activities

INTRODUCTION

Learners can be categorized as fast, average and slow learners.[1] According to Griffin (1978), slow learners are students who learn more slowly than their peers, yet do not have a disability requiring special education. A slow learner needs more time, more repetition and more resources from the teachers to make learning successful. According to National Centre for disability, 21 million slow learners were of school age. In Kerala, 320 slow learners were diagnosed across all Regional Early Intervention Centre institutions in all the Medical Colleges and 214 slow learners were diagnosed in all the District Early Intervention Centre institutions. Lack of attention span is the major characteristic problem faced by slow learners. Attention span is essential for acquiring knowledge. Attention span allows planning or previewing and monitoring and regulating our thoughts and actions. Slow learners' attention span can be improved by incorporating play activities

which enhance attention span.[2] In an academic environment, play helps the children to adjust to the school setting, thereby fostering school engagement and enhancing children's learning readiness, behaviours and problem-solving skills.[3]Play therapy can promote attention and concentration of children and help to prevent attention defects among children.[4] These children display weakness in thinking, finding-out relationships, similarity, familiarity, reasoning, poor development of concept, language, number concepts and memory. During the clinical experience, the investigators observed that slow learners are a special needy group therefore, the proposed objective of the study was to assess the attention span of slow learners and to determine the effectiveness of selected play activities on attention span among slow learners.

METHODOLOGY

The research design adopted was quasi-experimental pretest posttest control group design. Purposive sampling technique was used. The sample consisted of 30 slow learners each in the control and experimental group, in the age group of 8 to 12 years attending the Regional Early Intervention Centre at the Institute of Child Health, Kottayam.

A pretest was conducted to assess attention span in both the control and experimental groups using the Modified Mindfulness Attention Span Awareness – Child Scale. The investigator taught the intervention activities such as spot the difference, forward and backward counting, puzzles, copying and colouring pictures and memory tests to the experimental group in the presence of their parents for 60 minutes. Twice a week investigator assured that these activities were performed correctly with the help of telephonic communication. On the 28th day investigator conducted the posttest to assess the attention span of slow learners using the same scale. The obtained data was analyzed in terms of the objectives of the study using descriptive and inferential statistics.

RESULTS

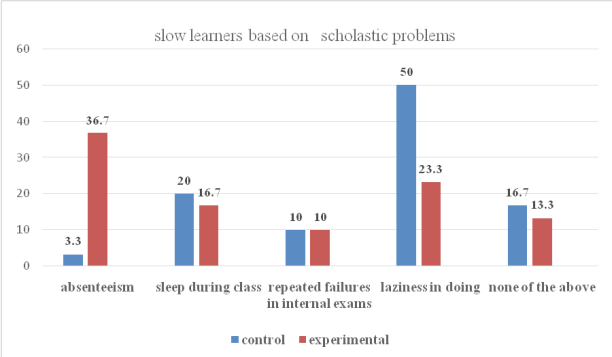

Figure 1: Frequency distribution and percentage of slow learners based on scholastic problems in control and experimental groups

Figure 1 shows that 50%of slow learners in the control group had laziness in doing home works and 36.7% in the experimental group had absenteeism.

Table 1: Frequency distribution and percentage of slow learners based on behavioral problems related to slow learning in control and experimental groups (n=60)

Sample Characteristics	*Control group (n=30)*		*Experimental group (n=30)*	
	f	*%*	*f*	*%*
Behavioral problems related to slow learning				
Emotional outbreaks	11	36.7	11	36.7
Delay in expressive Language	2	6.7	2	6.7
Delay in understanding	2	6.7	2	6.7
Decreased memory	10	33.3	9	30
Likes younger age groups than peers	0	0	4	13.2
None of the above	5	16.6	2	6.7

Table 1 depicts that 36.7% of slow learners in the control and experimental group had emotional outbreaks. About 6.7% in both the groups had delay in understanding and delay in expressive language.

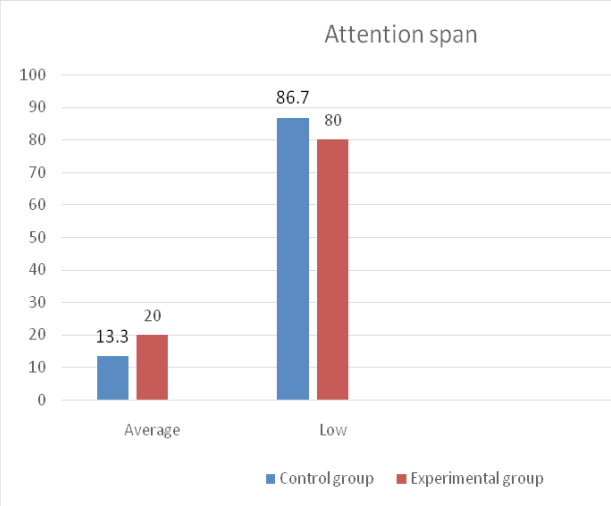

Figure 2: Frequency distribution and percentage of slow learner based on attention span in control and experimental group

From the above figure it is evident that 86.7%of slow learners in the control and 80% in the experimental group had low attention span.

Table 2 : Mean ranks, sum of ranks and Mann Whitney U value of attention span of slow learners in control and experimental groups (n=60)

Group	*Mean ranks*	*Sum of ranks*	*U*	*P*
Control (n=30)	12.50	496	41.00	0.001
Experimental (n=30)	33.3	1098		

Table 2 reveals that U value obtained for attention span among slow learners in control and experimental group was statistically significant. This shows that there was statistically significant difference in post-test attention span scores between control and experimental group. Thus, it was inferred that play activities were effective in improving attention span of slow learners.

DISCUSSION

The present study was supported by a study conducted among 4-6 year old children enrolled at Rasht kindergartens and preschool centers ,Iran on Effectiveness of Rhythmic Games. The results revealed performing of rhythmic games in interesting and hierarchical sessions gives children the opportunity to develop their skills in planning and organizing, flexibility, inhibition, and metacognition.[5]

The present study findings were also supported by an experimental study conducted in selected schools at Kulasekhara to evaluate the effectiveness of multisensory learning approach on academic performance among slow learners. Results shows that 67.9% of slow learner's academic performance was below fifty percentage. The study revealed that 36.7%of slow learners in the control and experimental group had behavioural problems like emotional outbreaks. [6]

The present study was supported by a descriptive study conducted in Netherland, among slow learners of adolescent age group to identify the home environment and development of slow learners. The results shown that 86.7% of slow learners in the control group and 80% in the experimental group had low attention span.[7]

The present study revealed that the selected play activities was effective in improvement of attention span (p=0.001). The present study findings were in congruent with another study of Tamil Nadu on effectiveness of play based learning activities in improving attention span showed that the attention span among slow learning children who received Activity Based Learning movement was significantly high (P=0.001).[8]

CONCLUSION

The study highlighted the need for improving attention span in slow learners by providing selected play activities for enhancing their academic performance. There was a significant difference in attention span among slow learners between the control and experimental groups. It can be concluded

that selected play activities are effective in improving attention span among slow learners. The intervention can be utilized as reference material for the students to plan and impart health education to parents of children with slow learning issues.

REFERENCES

1. Schmidt R. Consciousness and foreign language learning: A tutorial on the role of attention span and awareness in learning. Attention span and awareness in foreign language learning. 1995;9:1-63.
2. Tomlin RS, Villa V. Attention span in cognitive science and second language acquisition. Stud Second Lang Acquis. 1994 Jun;16(2):183-203.
3. Kohlberg L. Early education: A cognitive-developmental view. Child Dev. 1968 Dec 1:1013-62.
4. Farzadfard SA, Abdekhodaee MS, Ghenaee Chaman Abadi A. Effectiveness of combined purposeful play therapy and narrative therapy on pre-school children's attention and concentration. J Fundam Ment Health. 2015;17(5):2228.
5. Safay Honarvari H, Moshkbid Haghighi M. Effectiveness of rhythmic games on planning and organizing skills, flexibility, inhibition, and metacognition of pre-school children. Q J Child Ment Health. 2019 Nov 10;6(3):188-99.
6. Anitha VA. Effectiveness of Video Assisted Teaching Upon Awareness and Compliance of learning issues among Intellectually Disabled Adolescents [dissertation]. Chennai: Apollo College of Nursing.
7. Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ. The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. Prev Med. 2011 Jun 1;52:S10-20.
8. Ravichandran M, Murugesapandian N, Sivakumaren KS, Gopalakrishnan S. Use of web-based library services: a study among engineering students. Int J Curr Res. 2023 Mar;15(3):407-12.

Knowledge and Attitude regarding Prevention of Road Traffic Accidents among Nursing Students in a Tertiary Care Teaching Institution, Thiruvananthapuram

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Abstract

Road Traffic Accidents are considered one of the most important public health problems around the world. A Road Traffic Accident is defined as an accident involving at least one vehicle on a road open to public traffic in which at least one person is injured or killed. The objectives of the study were to assess the knowledge and attitude regarding the prevention of Road Traffic Accidents among Nursing students in a Tertiary Care Government Teaching Institution, Thiruvananthapuram and to find out the association between knowledge regarding the prevention of Road Traffic Accidents with sociodemographic variables and clinical variables and to find out the association between attitude regarding the prevention of Road Traffic Accidents with sociodemographic variables and clinical variables. The sample consisted of 100 participants. The research design adopted for the study was a cross-sectional survey. The study was conducted among Nursing students in a Tertiary Care Government Teaching Institution, in Thiruvananthapuram. The sample was selected by census method. The tools used for the study were self-administered questionnaires and rating scales. The major findings of the study were that 53% of participants had average knowledge, only 16% had good knowledge and 31% had poor knowledge. In this study, 42% of participants had an average attitude, 32% had a good attitude and 26% had a poor attitude. There was no association between knowledge regarding the prevention of Road Traffic Accidents with sociodemographic variables and clinical variables and there ass an association between attitude regarding the prevention of Road Traffic Accidents with the gender of Nursing students.

Keywords: Road Traffic Accident, Knowledge, Attitude

INTRODUCTION

Road Traffic Accident is any accident involving at least one road vehicle in motion on a public road or private road to which the public has a right of access, resulting in at least one injured or killed person.[1] Every year, the lives of approximately 1.3 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer from non-fatal injuries, with many incurring a disability as a result of their injury.[2]

Road Traffic Accidents are multi-cause phenomena and are the result of the interplay of various factors. These can be broadly classified as human error, road conditions, the environment, and vehicular conditions. Various factors include traffic rule violations like overspeeding, drunken driving, driving on the wrong side, jumping red lights, using mobile phones, driving without a valid driver's license, non-use of safety devices like helmets and seat belts, bad weather, unsafe road infrastructure, unsafe vehicles, and inadequate enforcement of traffic laws.[3]

Road Traffic Accidents were the 11th leading cause of all deaths worldwide and accounted for 2.1% of all deaths globally.[4]Accidents lead to disability, death, damage to health and property, social suffering, and general degradation of the environment. Road Traffic Accidents are a major but neglected public health challenge. Globally, millions of people are coping with the death or disability of family members from Road Traffic Accidents.[5]

The Global Status Report on Road Safety shows that over 1.2 million people die each year on the roads worldwide, and between 20 and 50 million suffer non-fatal injuries. Among children between the ages of 5 and 14, road traffic injuries alone ranked as the number one cause of disease burden and the third cause among those in the age group of 15 to 29 years,with a male - female ratio of 3:1.[6]

METHODOLOGY

The methodology employed is a quantitative research approach, utilizing a cross-sectional survey design conducted among Nursing students of Tertiary Care Government Teaching Institution, Thiruvananthapuram. The study focuses on Nursing students to assess their knowledge and attitude regarding the prevention of Road Traffic Accidents, with inclusion criteria comprising those who are willing to participate, who own a vehicle and who have a driving licence. The source population includes Nursing students meeting these criteria in Tertiary Care Government Teaching Institution, Thiruvananthapuram.A sample size of 100 was determined using the formula n=4 pq/ d2 considering 16 % had good knowledge regarding the prevention of Road Traffic Accidents and 32% had a good attitude regarding the prevention of Road Traffic Accidents.100 participants fulfilling the eligibility criteria were selected consecutively. Data collection tools consisted of a structured questionnaire to assess knowledge which consists of three sections- sociodemographic data, clinical data, knowledge regarding the prevention of Road Traffic Accidents and attitude regarding prevention of Road Traffic Accidents using a five-point Likert scale.

In the questionnaire, each correct response on the schedule was scored as one point with a maximum possible score of 16. The knowledge level is then classified into three categories based on the obtained score: Poor knowledge, below the 50th percentile, corresponding to scores less than 8. Average knowledge: Scores falling between the 50th and 75th percentile, ranging from 8-12.Good knowledge Scores above the 75th percentile, indicating scores greater than 12. The Likert scale consists of 5 choices: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree, each assigned a corresponding numerical value ranging from 1 to 5. With a total of 12 statements, the maximum achievable score on the Likert scale is 60. The technique utilized for assessment is self-reporting. Based on the obtained scores, the attitude level is classified into 3 categories: Poor Attitude: Scores falling below the 50th percentile, corresponding to scores less than 30. Average attitude: Scores ranging between 50th and 75th percentiles falling within the

range of 30-45. Good attitude: Scores exceeding 75 th percentile, indicating scores greater than 45. A pilot study confirmed the feasibility and effectiveness of the tools.

Data collection commenced after obtaining necessary permissions from IRC, IEC and written informed consent from participants. Data analysis employed descriptive and inferential statistics using SPSS-27 IBM software, exploring associations between socio-demographic, clinical variables, knowledge and attitude regarding Road Traffic Accidents among Nursing students in Tertiary Care Government Teaching Institution, Thiruvananthapuram.

RESULTS

Table 1
Sociodemographic data of the participants n=100

Variable	*Frequency*	*Percentage*
Age in years		
<25	60	60.0
25-30	18	18.0
>30	22	22.0
Gender		
Male	21	21.0
Female	79	79.0
Course of study		
BSc Nursing	44	44.0
General Nursing and Midwifery	6	6.0
Post Basic BSc Nursing	32	32.0
MSc Nursing	18	18.0
Year of study		
Second year BSc Nursing	14	14.0
Third year BSc Nursing	30	30.0
Second year General Nursing and Midwifery	5	5.0
Third year General Nursing and Midwifery	1	1.0
First year Post Basic BSc Nursing	18	18.0
Second year Post Basic BSc Nursing	14	14.0
First year MSc Nursing	18	18.0
Marital status		
Unmarried	70	70.0
Married	30	30.0

Table 1 shows that the majority of the students 60% belonged to the age group below 25 years, 18% belonged to the age group 25-30 and 22% belonged to the age group more than 30 years. The majority of Nursing students (79%)were Females and 21% were Male. 44% belonged to BSc nursing, 32% belonged to Post Basic Bsc Nursing ,18% belonged to MSc nursing, and 6% belonged to General Nursing and Midwifery. 30% of Nursing students were from Third year Bsc Nursing, 18% were from First year Post Basic Bsc Nursing and First year Msc Nursing, 14% were from Second-year Bsc Nursing and Second year Post Basic Bsc Nursing, 5% were from Second year General Nursing and Midwifery and 1% from Third year General Nursing and Midwifery. It also showed that the majority of Nursing students 70% were unmarried and 30% were married.

Table 2
Clinical Data of Participants, n=100

Variable	*Frequency*	*Percentage (%)*
Exposure to RTA		
Yes	19	19.0
No	81	81.0
Injuries in RTA		
Yes	16	16.0
No	84	84.0
Hospitalization due to RTA		
Yes	3	3.0
No	97	97.0

Table 2, shows that the Majority of Nursing students (81%) had no exposure to Road Traffic Accidents and about 19% of students had exposure to Road Traffic Accidents. 16 % of Nursing students had injuries in Road Traffic Accidents and 84 % of nursing students had no injuries in Road Traffic Accidents. 3% of Nursing students had hospitalization due to Road Traffic Accidents and the majority (97%) had no hospitalization due to Road Traffic Accidents.

Table 3
Association between sociodemographic variables and knowledge regarding prevention of RTA

Variables	*Good/Average knowledge*	*Poor knowledge*	*Chi Square*	*P*
Age in years				
<25	41	19		
25-30	10	8	3.2	0.200
>30	18	4		
Gender				
Male	13	8		
Female	56	23	0.626	0.429
Course of study				
BSc Nursing	29	15		
General Nursing and Midwifery	3	3	1.8	0.607
Post Basic BSc Nursing	24	8		
MSc Nursing	30	5		
Year of study				
Second year BSc Nursing	8	6		
Third year BSc Nursing	21	9	5.3	0.505
Second year General Nursing and Midwifery	2	3		
Third year General Nursing and Midwifery	1	0		
First year Post Basic BSc Nursing	15	3		
Second year Post Basic BSc Nursing	9	5		
First year MSc Nursing	13	5		
Marriage				
Unmarried	47	23		
Married	22	8	0.3	0.540

Table 3 shows the association between sociodemographic variables and knowledge was tested by Chi Square test. Age (x^2 = 3.2, p 0.200) gender (x^2 = 0.626, p 0.429) Course of study (x^2= 1.8, p 0.607) Year of study (x^2 = 5.3, p 0.505) Marriage (x^2 = 0.3, p 0.540) do not seem to have significant associations with knowledge levels.

Table 4
Association between clinical variables and knowledge regarding prevention of RTA

Variables	*Good/Average knowledge*	*Poor knowledge*	*Chi Square*	*P*
Exposure to RTA			2.5	0.111
Yes	16	3		
No	53	28		
Injuries in RTA			1.3	0.248
Yes	13	3		
No	56	28		
Hospitalization due to RTA			0.008	0.929
Yes	2	1		
No	67	30		

Table 4 shows the association between clinical variables and knowledge was tested by Chi-square test.Exposure to RTA (x^2= 2.5, p 0.111), Injuries in RTA (x^2= 1.3, p 0.248), Hospitalization due to RTA (x^2= 0.008, p 0.929). do not seem to have significant associations with knowledge level.

Table 5
Association between sociodemographic variables and attitude regarding prevention of RTA

n=100

Variables	*Good/Average knowledge*	*Poor knowledge*	*Chi Square*	*P*
Age in years				
<25	42	18		
25-30	14	4	1.3	0.514
>30	18	4		
Gender				
Male	10	11		
Female	64	15	9.6	0.002
Course of study				
BSc Nursing	33	11		
General Nursing and Midwifery	2	4	6.1	0.108
Post Basic BSc Nursing	26	6		
MSc Nursing	13	5		
Year of study				
Second year BSc Nursing	9	5		
Third year BSc Nursing	24	6		
Second year General Nursing and Midwifery	1	4		
Third year General Nursing and Midwifery	1	0	10.3	0.111
First year Post Basic BSc Nursing	14	4		
Second year Post Basic BSc Nursing	12	2		
Second year Post Basic BSc Nursing	13	5		
Marriage				
Married	49	21		
Unmarried	25	5	1.9	0.164

Table 5 the association between the sociodemographic variables and attitude was tested by the Chi-square test. Age (x^2 =1.3, p 0.514) gender (x^2 =9.6, p 0.002), course of study (x^2 =6.1, p 0.108), year of study (x^2 =10.3, p 0.111), marital status (x^2 =1.9, p 0.164) seem to have significant association between gender and attitude levels.

Table 6
Association between clinical variables and attitude regarding prevention of RTA, n=100

Variables	*Good/Average knowledge*	*Poor knowledge*	*Chi Square*	*P*
Exposure to RTA				
Yes	13	6		
No	61	20	0.379	0.538
Injuries in RTA				
Yes	10	6		
No	64	20	1.3	0.253
Hospitalization due to RTA				
Yes	2	1		
No	72	25	0.086	0.769

Table 6 shows the association between clinical variables and attitude tested by Chi-square test.Exposure to RTA (x^2= 0.379, p 0.538), Injuries in RTA (x^2 = 1.3, p 0.253), Hospitalization due to RTA (x^2 = 0.086, p 0.769). do not seem to have significant associations with knowledge levels.

Table 7
Association between knowledge and attitude regarding prevention of RTA, n=100

Variables	*Good/Average knowledge*	*Poor knowledge*	*Chi Square*	*P*
Good/average	53	16	0.915	0.339
Poor	21	10		

Table 7 shows the association between knowledge and attitude regarding prevention of Road Traffic Accidents was tested by Chi-square test (x^2= 0.915, p 0.339) do not seem to have significant associations between knowledge and attitude level.

DISCUSSION

In the present study, most participants belonged to <25 years (60%), 34.3% belonged to the age group 25-30 years and 22% belonged to >30 years. Most participants (79%) were females and 21% were males. In a similar study conducted to assess Knowledge, Attitude, and Practices regarding road safety among college students in Goa, 34.3% of responders belonged to the age of 20, <20 years (47.1%),>20 years (37.2%), majority of responders were female (72%) and the male was 28%.[7]

In the present study,30% of the participants were Third year BSc Nursing students, First year Post Basic BSc Nursing and First year MSc Nursing (18%), Second year BSc Nursing and Second year Post Basic BSc Nursing (14%), Second-year GNM(5%), Third-year GNM(1%).In a similar study conducted to assess the Knowledge and Attitude regarding road safety measures among college students in Faridabad, both Second-year BSc nursing and Third-year BSc nursing participated equally(50%).[8]

In the present study, the majority of participants were unmarried (70%) and only (30%) were married. In a similar study conducted to assess Knowledge, Attitude, and Practices of Road Traffic Accidents among car drivers in Majmaahcity, Saudi Arabia 50.3% were married and 49.7% were unmarried.[9]

In the present study, the majority of participants had no exposure to Road Traffic Accidents (81%), and (19%) had exposure to Road Traffic Accidents. In a similar study conducted to assess Knowledge, Attitude and Practices towards Road Traffic Safety Regulations among Health Science Students in Uttarakhand, 20% of students verbalized the history of Road Traffic Accident and 80% of students had no exposure to Road Traffic Accidents.[10]

In the present study, only (16 %) of Nursing students had injuries in Road Traffic Accidents and majority (84 %) Nursing students had no injuries in Road Traffic Accidents, majority (97%) had no hospitalization due to Road Traffic Accidents, 3% has hospitalization due to Road Traffic Accidents. In a similar study conducted to assess Knowledge and Attitude regarding the severity and outcome of Road traffic Injuries among Inpatients of a Tertiary Care Hospital in West Bengal, the majority (65.69%) received extremity injuries causing walking inability (41.36%), 34.24% faced fatal outcome,that is death and disability.[11]

In the present study ,the majority of Nursing students (53%) had average knowledge, 16% had good knowledge and 31% had poor knowledge. In a similar study conducted to assess the knowledge on prevention of Road Traffic Accidents among Undergraduate students of PSG College of Arts and Science in Coimbatore, Tamil Nadu 36.25% had poor knowledge, 62.5% had average knowledge and only 1.25% had good knowledge about Road Traffic Accidents.[12]

The study reports, 42 % of the participantshave average attitude, 32% have good attitude, and 26% have a poor attitude regarding the prevention of Road Traffic Accidents.In a similar study conducted on knowledge, attitude, and practices towards road safety regulations among College students in Telangana, where as the majority of the participants (80.3%) had good or average attitude, 19.7% had poor attitude towards road safety regulations.[13]

CONCLUSION

The conclusions were made based on the findings of the study. The study conducted among 100 Nursing students in a Tertiary Care Government Teaching Institution, Thiruvananthapuram reveals that 16% had good knowledge, 53% had average knowledge, 31% had poor knowledge, 32% had good attitude, 26% had poor knowledge, 42% had average attitude.There was a significant association between attitude and gender. However, there was no significant association between Knowledge and any of the sociodemographic and clinical variables.This highlights the need for a specific campaign to enrich the Knowledge and Attitude regarding the prevention of Road Traffic Accidents among Nursing students in a Tertiary Care Government Teaching Institution in Thiruvananthapuram, as increased knowledge level and attitude level can prevent the occurrence of Road Traffic Accidents.

REFERENCES

1. United Nations, European Union, and the International Transport Forum at the OECD. Glossary for transport statistics, 5th edition. 2019 [cited 2019 Nov 15]. Available from: https://ec.europa.eu/eurostat/documents/3859598/10013293/KS-GQ-19-004-EN-N.pdf/b89e58d3-72ca-49e0-a353-b4ea0dc8988f
2. World Health Organization. Global Status Report. Road traffic incidents. 2022 Jun 20 [cited 2023 May 21]. Available from: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries
3. Ministry of Road Transport and Highways. Road Accidents in India 2022. 2022 [cited 2023 May 21]. Available from: https://morth.nic.in/sites/default/files/RA_2022_30_Oct.pdf
4. World Health Organization. Road traffic injury prevention training manual. 2019 Jun [cited 2023 May 21]. Available from: http://apps.who.int/iris/bitstream/10665/43271/1/9241546751_org.pdf
5. World Health Organization. Magnitude and impact of road traffic injuries. 2021 Nov 23 [cited 2023 May 21]. Available from: http://www.who.int/violence.injury_prevention/road_traffic/activities/road_safety_training_manual_unit_1.pdf
6. World Health Organization. Global status report on road safety: time for action. 2022 Feb [cited 2023 May 21]. Available from: http://apps.who.int/iris/bitstream/10665/44122/1/9789241563840_eng.pdf
7. Patil SS, Kakodkar PV, Kakodkar RS. A study to assess knowledge, attitude, and practices regarding road safety among college students in Goa. J Educ Health Promot. 2020;9:207 [cited 2023 May 21]. Available from: https://www.bibliomed.org/?mno=84672
8. Batra N, Batra R. A study to assess the knowledge and attitude regarding road safety measures among college students of Faridabad. Int J Sci Res. 2018;7(9):71-74 [cited 2023 May 21]. Available from: https://www.researchpublish.com/upload/book/A%20study%20to%20assess%20the%20knowledge-5912.pdf
9. Abdulrahman M. Knowledge, attitude, and practice of road traffic accidents among car drivers in Majmaah city, Saudi Arabia. J Res Med Dent Sci. 2017-2018 [cited 2023 May 21]. Available from: https://www.jrmds.in
10. Gupta P, Gupta SK. Knowledge, attitude, and practices towards road traffic safety regulations among health science students in Uttarakhand, India: a cross-sectional study. Int J Adv Res. 2017;5(9):1295-1300 [cited 2023 May 21]. Available from: https://www.journalijar.com/article/15889/knowledge,-attitude-and-practices-towards-road-trafficsafety-regulations-among-health-science-students-in-uttarakhand:-a-cross-sectional-study-/
11. Paul B, Sarkar S, Suhan MM. A study conducted to assess knowledge and attitude regarding severity and outcome of road traffic injuries among inpatients of a tertiary care hospital in West Bengal. J Family Med Prim Care. 2018;7(6):1414-1419 [cited 2023 May 21]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6262659/
12. Sofia Princess Hema, Jayasudha. A study to assess knowledge on prevention of road traffic accidents among undergraduates, PSG College of Nursing, Coimbatore, Tamil Nadu, India. 2017 Jul [cited 2023 May 21]. Available from: www.ijrrjournal.com.pdf
13. Raju NJ, Reddy KP. Knowledge, attitude, and practices towards road safety regulations among college students in Telangana, India. Int J Community Med Public Health. 2021;8(4):1746-1751 [cited 2023 May 21]. Available from: https://www.researchgate.net

Perceived Barriers of Cancer Screening Uptake among Women above the age of 30 years residing in the field area of Medical College Health Unit, Pangappara

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Abstract

Breast cancer and cervical cancer are the most common cancers among Indian women, which are preventable disease because of its well defined, long pre-malignant phase. It can be detected easily by regular screening tests and follow up. Pap smear test, breast self-examination and mammogram are screening test for detection of cervical and breast cancer respectively. Present study was a descriptive cross sectional study intended to estimate the perceived barriers of cancer screening uptake among women residing in the field area of Integrated Family Health Centre, Pangappara, Thiruvananthapuram and to find its association with selected socio personal variables. The study was conducted among 90 women selected by multistage cluster sampling. The data were collected using socio-personal data sheet and a three-point rating scale to find the perceived barriers of cancer screening uptake with regard to psychosocial and individual barriers, family and financial barrier and health-care system related barriers. The study revealed that 55.6% of women did not had any perceived barriers and 44.4% of women had perceived barriers for cancer screening uptake. The present study found that there was no significant association between perceived barriers of cancer screening uptake among women and selected socio-personal variables like age of the women, education, occupation, prior information about cancer screening and family history of breast and cervical cancer. These findings suggest that increasing the knowledge, eliminating the barriers and having positive attitude regarding cancer screening can bring down the cases of cervical and breast cancer. There is a necessity to create a widespread awareness to eliminate barriers of cancer screening, its importance and to adopt healthy practices to improve the quality of life of women.

Key words: Perceived barriers, Cancer screening uptake, Women

INTRODUCTION

Breast cancer and cervical cancer are the two leading cancers in women worldwide, which are the most frequent and fatal cancer in women. Cancer is the second leading cause of death worldwide; it was responsible for 9.6 million deaths as reported in 2018 and accounts for about one in six deaths worldwide. Around 70% of deaths from cancer occur in low- and middle-income countries. The cancer burden continues to grow globally, exerting tremendous physical, emotional and financial strain on individual, family, community and health systems. Many health system in low and middle income countries are least prepared to manage this burden and large number of cancer patients globally do not have access to timely quality cancer screening and diagnosis. In countries where health system are strong survival rates of cancer patients are improving with early detection, quality treatment and rehabilitative care[1]. According to a report by the Indian Council Of Medical Research on the burden of cancer 2022, seven cancers accounted for more than 40% of the total cancer incidence, among this 40%, breast cancer is 10.5% and cervical cancer is 4.3%. The report also specifies that one woman dies of cervical cancer every 8 min and for every 2 women newly diagnosed with breast cancer, in which one women dies of it in India. In 2018, 1,62,468 new cases and 87,090 deaths were reported for breast cancer in India. Also new cases of cervical cancer detected in India were 96,922 every year and 60,078 died because of it.[2]

According to WHO fact sheet, in 2018 approximately half of breast cancers develop in women who have no identifiable breast cancer risk factor other than gender (female) and age (over 40 years). Other factors which increase the risk of breast cancer include obesity, harmful use of alcohol, family history of breast cancer, history of radiation exposure, reproductive history .[3]

In a study conducted to evaluate the knowledge regarding breast cancer risk factors, barriers, and attitude towards breast cancer screening, the result revealed that women has significantly lower knowledge about the risk factors. Women with higher education lead a healthy behaviour and has a positive attitude towards breast cancer screening. The result of this study also reflects inadequacy and lack of breast cancer awareness campaigns[4].

Cervical cancer is the fourth most common cancer in women, as per American Society of Clinical Oncology, globally 6,04,127 women were diagnosed with cervical cancer in 2020. Incidence rates of cervical cancer dropped by more than 50% from the mid-1970s to the mid-2000s due to an increase in screening, which can detect cervical changes before they turn cancerous. When diagnosed cervical cancer is one of the most successfully treatable forms of cancer as long as it is detected early and managed effectively. Effective primary (HPV vaccination) and secondary prevention approaches (early screening and treating precancerous lesion) can prevent most cervical cancer cases. From 2009 to 2018, incidence rates of cervical cancer generally remained the same. However, some decreasing incidence rates in young people is due to the use of the human papillomavirus vaccine[5].

In 2020, an estimation of 3,41,831 women died from cervical cancer worldwide. Cervical cancer is most often diagnosed between the ages of 35 and 44. The average age of diagnosis in the United States is 50. About 20% of cervical cancers are diagnosed after age 65. These cases usually occur in people who did not receive regular cervical cancer screenings before age 65. It is rare for people younger than 20 to develop cervical cancer[3].

A study was conducted to evaluate the use of the Pap smear screening method for detection of precancerous lesions. Most women who participated in the study were in the age range of 30–50 years and multiparous. Vaginal discharge was the most common complaint, occurring in 36.96% of the women. An irregular menstrual cycle was the complaint of 12.78% and abdominal

pain of 25.63% of women, while 15.15% were asymptomatic. The test was negative for malignancy in 48.84%, and 42.66% had infection or inflammation. Atypical squamous cells of undetermined significance, low-grade squamous intraepithelial lesion, and high-grade squamous intraepithelial lesion were detected in 2.90%, 5.09%, and 0.48%, respectively . Most women were reluctant to do Pap smear due to their shyness, culture or unawareness of the cervical cancer screening program. Most women were from urban area because of the accessible facilities for cervical cancer screening awareness program[5].

The uptake for cancer screening has been consistently poor in India despite the efforts of nationwide screening program. Understanding the barriers and enablers of cancer screening aids in knowing the proportion of cancer screening uptake in women. Barriers to cancer screening contribute to disparity in breast and cervical cancer screening rates.

The important key to cancer control is to change particular behaviours and sustain the activities that are involved in a new behaviour. Through education and awareness campaign, free or low cost screening program, family support those barriers can be reduced to an extent. The oncology nursing society has mandated that every individual must possess adequate information about cancer prevention, screening, and early detection.

Kerala health model is being well articulated worldwide and the literacy rate among women is 92.07%. But still according to researchers experience, many women do not undergo cancer screening and end up in late stage of cancers contributing to cancer mortality. Also very little studies has been published regarding barriers of cancer screening uptake among married women of Kerala. Hence researchers decided to do a descriptive study to find out barriers of cancer screening uptake among women above the age of 30 years residing in the field area of Medical College health unit, Pangappara.

METHODOLOGY

A cross sectional survey was conducted among 90 women selected by multistage cluster sampling from those residing in the field area of Integrated Family Health Centre, Pangappara who were married and above 30 years of age and had not underwent screening for breast and cervical cancer. The tool used for the survey included a socio personal data sheet and a 20 item three-point rating scale to assess perceived barrier of cancer screening among women which was prepared by the researchers. Barriers assessed included psychosocial and Individual barriers, family and financial barriers and health care system related barriers. Psychosocial and Individual barriers included assessment of fear towards cancer diagnosis, lack of awareness about cancer screening, hassles of life, embarrassment, stigma and myths. Family and financial barriers included family-related barriers, economic barriers and items related to health care system-related barriers. Each item was scored on a three point rating scale with agree, don't agree nor disagree and disagree options. 'Agree' was scored as one and 'Don't agree nor disagree and disagree' was scored as zero. Maximum score was 200. Lower the barriers experienced by women, lower are the scores. Content validity of the tool was ensured by three subject experts in the field of Obstetrics and Gynaecology and Community Health Nursing.

Formal permission was obtained from Institutional Research Committee, Institutional Human Ethics Committee Govt. College of Nursing, Thiruvananthapuram and Administrative Medical Officer, IFHC, Pangappara. Subjects who met inclusion criteria were identified. Objectives of the study was explained and participant informant sheet was provided to the study participants. Written informed consent was obtained from participants. The tool used to assess perceived barriers of cancer screening uptake among women was distributed to study participants and thirty minutes were given to complete the rating scale. The tool was collected after ensuring the completeness.

PILOT STUDY

Pilot study was conducted among 10 women. The tool was found to be feasible and hence no modifications were made in the tool.

ETHICAL CONSIDERATION

Ethical clearance was obtained from Institutional Human Ethics Committee, Govt. College of Nursing, Thiruvananthapuram. Written informed consent was obtained from the study participants. The collected data was kept confidential.

RESULTS

Socio-personal variable

Table 1 Distribution of women based on sociodemographic variables

N = 90

Sociodemographic variables	*Frequency*	*Percentage*
Age (Years)		
31-40	30	33.3
41-50	15	16.7
51-60	27	30
>60	18	20
Education		
Primary	12	13
High School	14	16
Diploma	24	27
Middle School	17	19
Graduate/Postgraduate	23	25
Occupation		
Unemployed	49	54.4
Unskilled worker	3	3.4
Semi-skilled	6	6.7
Skilled worker	21	23.3
Clerical/ shop owner/ farmer	9	10
Semi- professional	2	2.2

In the present study, 33.3% of the women were in the age group of 31-40 years, 26.7% of women had high school education and 54.4% of women were unemployed.

Table 2 Source of information regarding cancer screening

N = 90

Sociodemographic variables	*Frequency*	*Percentage*
Relatives / friends	34	37.9
Health Magazine	22	24.1
Health professional	10	11
Mass media	10	11
Social media	10	11

Table 2 shows that the 37.9% of women received the information regarding cancer screening from friends and relatives.

Perceived barriers of cancer screening among women

Table 3 Distribution of women based on the presence of perceived barriers of cancer screening

N= 90

Sociodemographic variables	*Frequency*	*Percentage*
Present	40	44.4
Absent	50	55.6

Table 3 reveals that 55.6% women don't had any perceived barriers and 44.4% of women had perceived barriers of cancer screening

Table 4 Mean and Standard deviation of perceived barriers of cancer screening uptake among women.

N = 90

Perceived barriers	*Mean*	*Standard deviation*
Psychosocial and individual barriers	1.34	1.1
Family and financial barriers	0.4	0.5
Health care system related barriers	0.6	0.6

The mean score of psychosocial and individual barriers was 1.34±1.1. The mean score of family and financial barriers was 0.4±0.5. Mean score of health care system related barriers was 0.6±0.6 (Table 4)

Association between perceived barriers of cancer screening uptake among women and selected socio personal variables.

Perceived barriers of cancer screening uptake among women had no significant association between socio-personal variables like age, level of education, occupation, prior information and source of information about breast and cervical cancer screening.

DISCUSSION

Finding from the present study revealed that only 44.4% of women had any perceived barriers for cancer screening uptake. The mean score of psychosocial and individual barrier is estimated as 1.34±1.1, which include fear towards cancer diagnosis, lack of awareness about cancer screening, hassles of life, embarrassment and stigma, myths. The mean score of family and financial barriers is 0.4±0.5 which include family related and economic barriers and the mean score of health care system related barriers is 0.6±0.6.

This findings were congruent with a study done to explore the perceived barriers of cancer screening through the lens of implementers and beneficiaries of national screening program which reported poor knowledge about cancer, benefits of screening service availability, as well as a general sense of well-being, embarrassment or anxiety related to the screening procedure, fear of being judged for lack of modesty, and stigma were common barriers to screening uptake. In addition to a general unawareness about cancer, geographical inaccessibility for screening act as a barrier to participate in cancer screening, in certain regions[6].

The finding was also consistent with study conducted among 100 women in Nepal to assess the knowledge, attitude, and practice regarding Pap smear test assessed. 49% of the respondents were housewives. About 45% of the respondents had education up to secondary level and 11% of the respondents were uneducated. About 41% of the respondents got information from television whereas only 30% got information from health personnel. Even though 90% of the respondents had heard about cervical cancer only 53% had heard about Pap smear test. Among 100 women 47% had good knowledge, 38% had positive attitude, and only 13% had good practice regarding Pap smear test. Higher education had significant relation with adequate knowledge, attitude, and practice regarding Pap smear test.[7]

Contradictory results were reported in another study conducted in Andhra Pradesh on knowledge, attitude and practice towards cancer screening. Majority 86.6% had poor practice towards cancer screening and it shows there was strong association between socio-demographic characters like age, level of education with the practice of cancer screening[8].

CONCLUSION

Breast and cervical cancer are most common cancer for women globally. The uptake of cancer screening has been consistently poor in India despite the efforts of nationwide screening program. Understanding the barriers among community women would aid in increasing the proportion of cancer screening uptake. The perceived barriers of the breast and cervical cancer varies remarkably throughout the regions of the world and is a serious health problem in both developing and developed countries. Early detection of the pre-cancerous cells and adopting healthy practices aid to improve the quality of life of women.

REFERENCES

1. Rakibul M Islam, Baki Billah, Md. Nassif Hossain, John Oldroyd Barriers To Cervical Cancer Screening Uptake In Low-Income And Middle-Income Countries: A Systematic Review, Asian Pacific Journal Of Cancer Prevention : APJCP , (2017) 98- 117
2. National Institute Of Cancer Prevention And Research(NICPR), Under ICMR, Fact Sheet, India Against Cancer, Available In http://cancerindia.org.in/cancer-statistics/, 2018
3. American society of clinical oncology, Fact sheet, available on, https://www.cancer.net/cervicalcancer/fact sheet/details, 2022(accessed January 2022)
4. Laura Nyblade Et. Al, A Qualitative Exploratiuon Of Cervical And Breast Cancer Stigma In Karnataka , India, BMC Women's Health. August 2017
5. S.B. Abdel-Aziz, T.T. Amin, M.B. Al-Gadeeb, A.I. Alhassar, A. Al-Ramadan, M. AlHelal, M. Bu-Mejdad, L.A. Al-Hamad, E.H. Alkhalaf, Perceived barriers to breast cancer screening among Saudi women at primary care setting, Asian Pac. J. Cancer Prev. APJCP 18 (9) (2017) 2409–2417
6. M. Elshami, H.A. Kmeil, M. Abu-Jazar, I. Mahfouz, D. Ashour, A. Aljamal, N. Mohareb, R. Elbalaawi, R. Dabbour, J. Ghaith, T. Hasan, M. Abdelati, E. Saleh, H. Shawwa, R. Al-Ghazali, O. Obaid, L. Albarqouni, B. Bottcher, Breast cancer awareness and barriers to early presentation in the Gaza-Strip: a cross-sectional study, J. Glob. Oncol. 4 (2018) 1–13
7. Ranabhat S, Tiwari M.et al. Association of knowledge, attitude and demographic variables with cervical pap smear practice in Nepal.Vol.15, Asian Pacific Journal .2014.p.8905-8910.
8. Priyanka Shrestha .Knowledge, attitude, and practice regarding Pap smear test among women in Dharan. Faculty of health sciences. Department of community medicine. HEL-3950 Master's thesis in public health August 2014. https://munin.uit.no/bitstream/handle/10037/7995/thesis.pdfsequence=2

FLORENCE NIGHTINGALE : A LEGENDARY VISIONARY

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INTRODUCTION

Florence Nightingale is a unique figure in the history of Nursing in the world. The history of professional nursing began with Florence Nightingale. Nightingale's vision of nursing changed society's view of nursing. She believed in personalized and holistic client care. Her vision also included public health and health promotion roles for nurses. The nursing profession embraces her as the founder of modern nursing.She is still an inspiration to nurses around the globe[1].

International Nurses Day, an annual observance held on May 12 commemorates Florence Nightingale's birth. International Council of Nurses has chosen the theme for 2024 as "Our Nurses. Our Future. The Economic Power of Care". This year's International Day aims to reshape perceptions of nursing, demonstrating how strategic investment in nursing can bring considerable economic and societal benefits[2].

Florence Nightingale's contributions to nursing are well documented. Her achievements in improving the standards for the care of the war causalities in Crimea earned her the title "Lady with the Lamp". Her efforts in reforming hospitals and in producing and implementing public health policies also made her an accomplished 'Political Nurse': she was the first nurse to exert political pressure on the Government. Through her contribution to nursing education perhaps her greatest achievement- she is recognized as nursing's first scientist- theorist for her work, 'Notes on Nursing'[3].

BEQUEST OF FLORENCE NIGHTINGALE

Florence Nightingale (12 May 1820 – 13 August 1910) was born to a wealthy and intellectual family. She believed she was "called by God to help others and to improve the well- being of mankind. She was determined to become a nurse despite opposition from her family and the restrictive societal code for affluent young English women[4].

Nightingale envisioned nurses as a body of educated women at a time when women were neither educated nor employed in public service. Following her wartime service of organizing and caring for the

wounded in Scutari during the Crimean War Nightingale's vision and establishment of a School of Nursing at St. Thomas Hospital in London marked the birth of modern nursing.Florence Nightingale wrote "***Notes on Nursing" in 1859***, which became decisive in shaping the curriculum of the Nightingale School and various other nursing institutions. Nightingale recognized the unique focus of nursing and declared nursing knowledge as distinct from medical knowledge.

She was an exceptionally astute researcher, a daring systems thinker, and a witty writer deeply ingrained within networks of political and intellectual influencers. She emerged as a pioneer of evidence-based healthcare, drawing invaluable insights from the stark realities of the high mortality rates observed during the Crimean War.

Undoubtedly, Nightingale is hailed as a visionary in the graphical representation of statistics. She is particularly celebrated for her innovative use of the polar area diagram, sometimes referred to as the Nightingale rose diagram. This method, akin to a contemporary circular histogram, allowed her to vividly illustrate the seasonal patterns of patient mortality within the military field hospital under her management.Florence is also credited with inventing a sort of pie-chart which she called a coxcomb diagramme and was the first woman to be elected to the Royal Statistical Society. She was also the second woman to be awarded the Freedom of the City of London, which she received in 1908[5].

She inspired the founding of the International Red Cross which still awards the Florence Nightingale Medal for nurses who have given exceptional care to the sick and wounded in war or peace.Nightingale was a stunning and versatile writer. In her lifetime, much of her published work was concerned with spreading medical knowledge. She set an example of compassion, commitment to patient care and diligent and thoughtful hospital administration. The first official nurses' training programme, her Nightingale School for Nurses, opened in 1860 and is now called the "Florence Nightingale Faculty of Nursing and Midwifery"[6].

NIGHTINGALE'S PREVISION

Nightingale's cutting-edge book, Notes on Nursing: What It Is and What It Is Not, published in 1860, gave the world a handbook for taking care of the sick and a blueprint for running a healthcare system.[7]

INFECTION CONTROL

"True nursing ignores infection, except to prevent it." (p. 20) "Every nurse ought to be careful to wash her hands very frequently during the day. If her face too, so much the better." (p. 53)[7]

Her contributions in the field of infection control especially handwashing is exceptional.

PATIENT CONFIDENTIALITY

"And remember every nurse should be one who is to be depended upon, in other words, capable of being a 'confidential' nurse...she must be no gossip, vain talker; she should never answer questions about her sick except to those who have a right to ask them." (p. 70)[7]. Nightingale viewed that nurses are bound to secrecy for all personal matters and family matters, which may become known to them, while exercising their work.

EVIDENCE-BASED PRACTICE

"The most important practical lesson that can be given to nurses is to teach them what to observe—how to observe—what symptoms indicate improvement—what the reverse—which are of importance—which are of none—which are the evidence of neglect—and of what kind of neglect." [7]She directed her nurses to perform activities based on best practices and evidence.

NURSES AND EDUCATION

She believed that nursing was a science and an art developed by practice and discipline. She was adamant that the nurse was not just an assistant to the physician and that training embodied teaching the nurse to help the patient live well.

Nightingale's goals for the nursing profession were to organize and standardize the education of nursing (i.e; training) and raise nursing to a respectable profession through enlisting and training pupils of good character and morals; role models of compassion and empathy; and influencers of other caregivers. Her contemporary stated she sought "to raise nursing to the rank of High Art" (p. 448)[7]. As she developed formal nursing education, she based it on her experiences in Crimea, with a focus on improving patient care. Nightingale believed that schools should be independent of hospital control, but near to hospitals where practical training was available.

MEDICAL TOURISM

Nightingale was regarded as a pioneer of medical tourism. The term medical tourism refers to patients traveling overseas to receive medical treatment. This term was once associated with people looking for treatment in developed countries for medical conditions they could not handle at home. However, it has also come to apply to people from rich countries who travel to developing countries for cheaper medical treatment in recent years[8].

200 years later, does Florence Nightingale speak to us today?

Nightingale's vision was thoroughly modern: intersectoral, interdisciplinary and global. Her understanding of the physical and psychological environment of the hospital and home reveal not only a deep scientific understanding of hygiene, but health and healing, details of care that added to comfort as well as nourishment of the human spirit

Nightingale's statistical and analytical skills formed the bedrock of her international and comparative statistics, anticipating the development of **International Classification of Disease (ICD)** codes today. Her research on hospital outcomes finds echoes in the work on staffing by Aiken et al. She was, above all, a brilliant communicator both visually, through data, and verbally, through the power and epigrammatic prose style. She was adept at presenting data in a graphic form to dramatize her message and move her audience to action. She understood the power of statistics to change minds and encourage politicians to implement reform.[9]

Her teaching on hygiene remains exemplary as we battle with sepsis, excess mortality attributable to hospital acquired infections: MRSA and C. difficile. Added to that, antimicrobial resistance (AMR) is poised to be one of the leading causes of mortality by 2050, in which hand washing and hygiene may be some of the most potent defences against transmission. AMR forces us to fall back on practices of the pre-antibiotic period.[9]

Her advocacy for nursing as a secular profession, empowering women to receive training, education, and pursue self-sufficiency, has significantly magnified the influence of education on population health, both directly and indirectly. Research indicates that investing in nursing education yields substantial health benefits for communities, enhancing their health literacy.[10]

Notes on Nursing would be relaunched as an online platform to empower patients and their families in the 21st Century in how to keep healthy and look after themselves, targeting those with chronic disease and mental health problems in the first instance. She would train a new breed of digital nurse designers to produce solutions for care delivery and patient safety systems as well as engage with innovations such as block chain. She would remind us that globalisation is an opportunity to connect with our values, each other and set out a bold manifesto for change. This

would require a power shift from 'old' to 'new power'' and new ways of collaborative working. Nursing associations would need to adapt and work together to form a super collaborative to use their collective organising power to mobilise on a scale as never before, working closely with the public, patients and families.[11]

Finally, she would urge an intergenerational approach, with young and older leaders trained together in organising methods and political influencing skills. Together, they would embody the ethos of the new generation Nightingales, leading the charge to establish nursing as a global social movement for the betterment of society.

REFERENCES

1. Alligood MR. Nursing theorists and their work. 8th ed. St. Louis: Elsevier; 2014.
2. International Council of Nurses. International Nurses Day 2024. Available from: https://www.icn.ch/news/international-nurses-day-2024
3. Florence Nightingale Museum. Available from: https://www.florence-nightingale.co.uk
4. McDonald L. Florence Nightingale: A Very Brief History. Augsburg Fortress Publisher; 2018. ISBN: 1506431712
5. Matthews JH, Whitehead PB, Ward C, Kyner M, Crowder T. Florence Nightingale: Visionary for the Role of Clinical Nurse Specialist. OJIN: Online J Issues Nurs. 2020;25(2).
6. Karimi H, Masoudi Alavi N. Florence Nightingale: The Mother of Nursing. Nurs Midwifery Stud. 2015 Jun;4(2):e29475. PMCID: PMC455741. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4557413
7. Nightingale F. Notes on Nursing: What It Is and What It Is Not. London: Harrison and Sons; 1860.
8. Attarbashi BH. Florence Nightingale: The Mother of Modern Nursing. LinkedIn. Available from: https://www.linkedin.com/pulse/florence-nightingale-mother-modern-nursing-brian-hadi-attarbashi
9. World Health Organization. WHO launches global patient safety challenge; issues guidelines on hand hygiene in health care. 2005. Available from: http://www.who.int/mediacentre/news/releases/2005/pr50/en/
10. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules. Available from: http://www.hhs.gov/ocr/privacy
11. Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: The National Academies Press; 2001. p. 147.

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