Research Article

Effectiveness of Planned Teaching Programme (PTP) On Knowledge Regarding "FAST HUGS BID" Mnemonic among B.Sc. Nursing Final Year Students

Miss. Monika Bhonde[1*], Mr. Amos Talsandekar[2]

[1*]Final Year M.Sc. Nursing Student, Dept. of Medical- Surgical Nursing, D. Y. Patil College of Nursing, Kolhapur – 416003. D. Y. Patil Education Society, (Deemed to Be University), Kolhapur, Maharashtra, India.

[2]M .Sc. (N) Associate professor. Dept. of Medical- Surgical Nursing, D. Y. Patil College of Nursing, Kolhapur – 416003. D. Y. Patil Education Society, (Deemed to Be University), Kolhapur, Maharashtra, India.

Email id: bhondemonika1999@gmail.com

ABSTRACT

Background and objectives: A critical care unit is a constantly overcrowded ward where terminally ill patients get life-sustaining treatment while being closely monitored. Innovative therapeutic approaches are frequently implemented in ICUs to enhance patient care so FASTHUGSBID mnemonic used in Intensive care unit for proper management of patient care by the health care personnels. The FAST HUG mnemonic was created by Sir JL Vincent. He wrote an article named "Give your patient a FAST HUG (at least) once a day" in the year 2005. Later it was modified by WR Vincent and Hatton and made FAST HUGS BID[1].

The FAST HUGS BID, has been established to promote communication among nursing and physician caregivers in the ICU[5]. Critical care nursing demands a structured and evidence-based approach to ensure comprehensive patient management. The mnemonic FAST HUGS BID (feeding, analgesia, sedation, thromboembolic prophylaxis, head-of-bed elevation, ulcer prophylaxis, glycemic control, spontaneous breathing trial, bowel regimen, indwelling catheter removal, de-escalation of antibiotics) serves as valuable checklist for optimizing intensive care unit (ICU) patient care. It helps health care providers systematically assess and address key aspects of critical care, reducing complications and improving patient outcome.

Hence, there is need to provide knowledge on FASTHUGSBID among B.Sc. Nursing Final Year students studying in D.Y. Patil College of Nursing, Kolhapur.

Objectives of the study were, To Assess the Pre-Test Knowledge scores regarding "FAST HUGS BID" mnemonic among B. Sc. Nursing Final year students, To evaluate the effectiveness of Planned teaching Programme on "FAST HUGS BID" mnemonic among B. Sc Nursing Final year students, To find out an association between mean pre-test knowledge score on "FAST HUGS BID" mnemonic and selected sociodemographic variables of B.Sc. Nursing final year students.

Methods: The research approach adopted for the study was quantitative evaluative and design was quasi-experimental, one group pre-test post-test design. By using simple random sampling technique 80 students were selected from B.Sc. Nursing final year at D. Y. Patil College of Nursing, Kolhapur. Structured knowledge questionnaires were used to assess the knowledge regarding FAST HUGS BID mnemonic. The reliability of the tool was tested by using test-retest method and Spearman`s Brown formula. The reliability computed was r = 0.80. Data were analysed by using mean, median, mode, range, standard deviation, paired't' test, chi square test.

Result: In the pretest, majority of 43(56.3%) participants had average knowledge,25 (31.3%) participants had poor knowledge and 10(12.5%) participant had good knowledge. In the post-test, majority of 45(56.3%) participants had good knowledge and 30(37.5%) participants had average knowledge and 5(6.3%) had poor knowledge score regarding FAST HUGS BID mnemonic. The p value (0.001) is less than 0.05 level of significance and (ttab value -24.32). The findings reveals that the planned teaching programme (PTP) is effective in improving knowledge score among students. There is significant association between knowledge score and gender. (p value = 0.008). There is significant association between knowledge score regarding FAST HUGS BID mnemonic and selected sociodemographic variables among B.Sc. Nursing final year students studying in selected college of nursing at 0.05 level of significance.

Interpretation and conclusion: The overall findings showed that in pretest the majority of students had average knowledge score and in post-test the majority of students had good knowledge score. There was significant association between knowledge score regarding FAST HUGS BID and gender. So it conclude that the planned teaching programme (PTP) was effective in improving the knowledge regarding FASTHUGSBID mnemonic among B. Sc Nursing Final year students.

Keywords: Effectiveness, FAST HUGS BID mnemonic, planned teaching programme (PTP), Nursing students.

INTRODUCTION

The mnemonic is a cognitive tool used in education to direct the world. The FAST HUG mnemonic was created by sir JL Vincent. He wrote an essay titled "Give your patient a FAST HUG (at least) once a day" in the year 2005. Later WR Vincent and Hatton changed FAST HUG mnemonic into FAST HUGS BID by adding extra components. In that FAST HUGS BID F stands for feeding, A stands for analgesics, S stands for sedation, T stands for thromboembolic prophylaxis, H stand for head-of-bed elevation, U stands for stress ulcer prophylaxis, G stands for glycemic control, S stands for spontaneous breathing trial, B stands for bowel regimen, I stands for indwelling catheter removal and D stands for de-escalation of antibiotics[1]. The acronym FAST HUGS BID serves as a checklist that emphasises broad, crucial elements of care for patients admitted to the critical care unit. With regard to feeding, analgesia, sedation, thromboembolic prophylaxis, head end bed elevation, stress ulcer prophylaxis, glucose control, spontaneous breathing trial, bowel regimen, indwelling catheter removal, and de-escalation of antibiotics, the mnemonic emphasises the significance of adhering to clinical practices. Protocols can be used with it. Using checklists in intensive care units can help to improve patient safety and care[2].

A critical illness is something that can end a person's life. They are impacted by critical illness on a spiritual, social, psychological, and bodily level. The purpose of goal-oriented care is to help people survive and reach their full potential—physical, psychological, and social. Patients who are critically ill and admitted to the intensive care unit (ICU) may need complex and intensive nursing care in relation involves the application of modern biological technologies and injectable polypharmacy, including constant replacement of kidneys, mechanical breathing device, cardiac assist devices, cerebral pressure monitoring, and hemodynamic monitoring[2].

This mnemonic used for routine care of patients who are admitted in ICU. It is used to improvise the quality care of patients. Reviewing the FAST HUGS BID mnemonic enhance the efficiency, safety and quality of patient care in ICU[1].

Evidence-based care requires multidisciplinary practices and a checklist to reduce the likelihood of side effects. In order to enhance the care given to all critically ill patients, the FAST HUGS BID mnemonic—which stands for feeding, analgesics, sedatives, thromboprophylaxis, head-up position, ulcer prophylaxis, glucose control, bowel care, indwelling catheter removal, and de-escalation of antibiotics—should be used regularly during multidisciplinary rounds[5]. The "FAST HUGS BID" mnemonic can help prevent infections.

Therefore, the researcher want conduct a quasi-experimental study to evaluate the effectiveness of planned teaching programme (PTP) on knowledge regarding "FAST HUGS BID" mnemonic among B.Sc. Nursing Final Year students studying in selected College of Nursing, Kolhapur.

METHOD

A quasi-experimental research design was used for this study. Quantitative evaluative approach was used for the study. The sample were selected for the study includes 80 students of B.Sc. Nursing final year studying in D.Y. Patil College of Nursing by using probability simple random sampling technique. The reliability of the tool was established by using test-retest method and reliability computed was r= 0.80. and the data was collected by using socio-demographic data and questionnaires. 36 knowledge questions were used for the study.
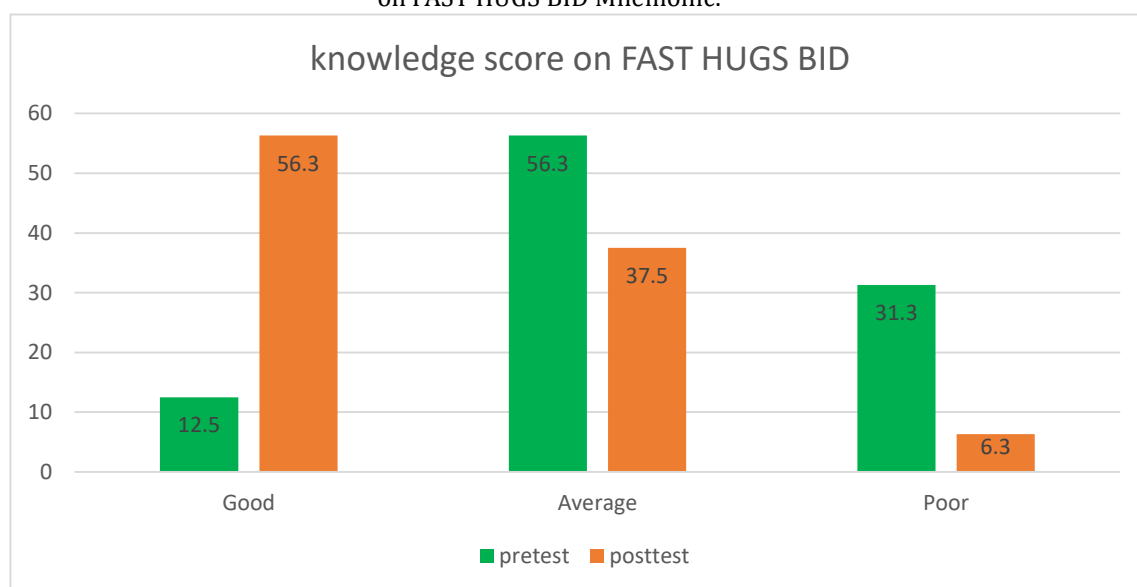
RESULT

Table 1. Distribution of frequency and percentage of subjects according to sociodemographic variables.

S. No.	Sociodemographic variables	f(%)
1	**Age in year**	
	a.20-21year	40(50.0)
	b. 22-23year	37(46.3)
	c. 24year and above	3(3.8)
2.	**Gender**	
	a. Male	37(46.3)
	b. Female	43(53.8)
	c. Transgender	-
3.	**Resisdential area**	
	a. Urban	44(55.0)
	b. Rural	29(36.3)
	c. Semiurban	7(8.8)
4.	**Any health care worker in family**	
	a. Yes	28(35.0)
	b. No	52(65.0)
5.	**Previous knowledge on FAST HUGS BID mnemonic**	
	a. Yes	6(7.5)
	b. No	72(90.0)
	c. Some extent	2(2.5)
6.	**Any volunteer involvement in health care related activities or project.**	
	a. Yes	15(18.8)
	b. No	65(81.3)

n=80

Table 2. Distribution of Frequency and Percentage of Pre-Test and Post-Test Knowledge Scores of Subjects on FAST HUGS BID Mnemonic.

N=80

Table 3. Mean, Median, Mode, Range And Standard Deviation Of Pre-Test And Post-Test Knowledge Scores Of Subjects Regarding FAST HUGS BID Mnemonic.

	Mean(±SD)	Median	Mode	Range
Pre-test	15.83(±7.49)	17	18	28
Post test	22.45(±6.77)	25	25	24
Difference	6.62(±0.72)	8	7	4

n=80

Table 4. Effectiveness of planned teaching programme (PTP) on knowledge of FAST HUGS BID mnemonic.

Mean ± Standard deviation	t test	P value
6.61±2.43	24.32	0.001*

n=80
$df_{(79)}$ *significance at $p<0.05$ level.

Table V: Association between knowledge score and selected sociodemographic variables.
The result of chi-square values indicate a significant association between the knowledge score on FAST HUGS BID mnemonic with gender (9.66 and p value 0.008 at 0.05 level)

DISCUSSION
1. Finding on distribution of Pre-test and Post-test Knowledge score of subjects regarding FAST HUGS BID mnemonic.
In current study the pretest knowledge score, 56.3% (45) of the subject had average knowledge on FAST HUGS BID, 31.3% (25) of the subject had poor knowledge on FAST HUGS BID and 12.5% (10) had good knowledge on FAST HUGS BID. In post-test 56.3%(45) of the subject had good knowledge on FAST HUGS BID, 37.5% (30) of the subject had average knowledge on FAST HUGS BID and 6.3% (5) had poor knowledge on FAST HUGS BID. The findings in the pre-test indicate that students have limited knowledge on FAST HUGS BID but after giving planned teaching programme the students' knowledge increased which are revealed in Post-test findings. Similar study was conducted to assess the effectiveness of structured teaching programme on knowledge of FAST HUGS BID mnemonic among student nurses in selected nursing colleges at Surat city. The results shows that in pretest, 92% of them student nurses had average knowledge (score 14-26) and 8% of them had good knowledge (score 27-40) regarding FASTHUGBID. In posttest, 44% of them had average knowledge (score 14-26) and 56% of them had good knowledge (score 27-40) regarding FASTHUGBID. Result reveals that there is remarkable improvement in the knowledge of the nurses regarding FASTHUGBID. The paired t-test was conducted to compare the pretest and posttest scores. After giving planned teaching programme students become aware about FAST HUGS BID mnemonic and confidently apply the knowledge in clinical practice. The study findings reveals that mnemonic based teaching enhances learning outcome in critical care nursing.

2. Findings on effectiveness of planned teaching programme on FAST HUGS BID mnemonic among B.Sc. Nursing final year students.
In current study the mean post-test knowledge of subject is higher than their mean pre-test knowledge score regarding "FAST HUGS BID" mnemonic among B.Sc. Nursing final year students. The P value was 0.001 which was less than 0.05 and the computed "t" value was greater than the table value, i.e. (tcal=24.32) (ttab=1.66). This demonstrate that the mean knowledge score of pre-test and post-test is significantly different. The result shows that planned teaching programme is effective method to enhancing the knowledge among B.Sc. Nursing final year students. Similar study was carried out to assess the

effectiveness of structured teaching programme on knowledge of FAST HUGS BID mnemonic among student nurses in selected nursing colleges at Surat city. The results show that the calculated "t" value was higher than the tabulated value (t cal - 6.0) (ttab - 2.00) and the p-value was 0.001, which was less than 0.05. This implies a significant improvement in the student nurses' knowledge of FAST HUG BID[5]. The significant improvement in post-test score can be attributed to simplified complex ICU care into memorable checklist making it easier to recall and apply the knowledge. Also interactive lecture and role play during teaching programme can be effective, routinely used FAST HUGS BID mnemonic as a standardised checklist to improve the ICU patient care.

3. Findings on an association between mean pre-test knowledge score on FAST HUGS BID mnemonic and selected sociodemographic variables among B.Sc. Nursing final year students.

In present study it found a significant association between gender and knowledge score on FAST HUGS BID mnemonic at 0.05 level of significance. The p value was 0.008 which is less than 0.05 level of significance (tcal 9.66). Showing that females had a higher knowledge score than males. The remaining sociodemographic variables does not show any significant association. The study reported contrasting results was to assess the effectiveness of structured teaching programme on knowledge regarding FAST HUGS BID in improving patients care and safety of critically ill patients among staff nurses working in ICU set-ups in selected hospitals at Rajkot. The findings indicate that there was significant association between the level knowledge regarding FAST HUGS BID and selected demographic variables. There was an association between course and sociodemographic variables[12]. This suggest that knowledge acquisition also depends on other sociodemographic variables like educational level. One possible explanation for gender difference in knowledge could be variation in educational attainment and access to information. The study identifies the other factors such as sample size and exposure to health-related information. Using digital platform and awareness programme can help to improve the knowledge among males.

CONCLUSION
Majority of the students gained knowledge regarding FAST HUGS BID mnemonic after giving planned teaching programme.
Present study was experimental in nature and was undertaken to evaluate the effectiveness of planned teaching programme on knowledge regarding "FAST HUGS BID" mnemonic among B.Sc. Nursing Final Year students studying in selected College of Nursing, Kolhapur.

Implication of the Study
The findings of the study have implications for the nursing profession. The implications have been written under the following headings- Nursing practice, Nursing administration, nursing education, nursing research.

Nursing Practice
- The findings of the study helps to plan the quality care in critical care unit (CCU).
- Using this as a checklist will help to avoid the error in nursing practice and improve the patient care.
- Reduces the duration of ICU stays.

Nursing Administration
- A session can be organised and led by a nurse manager to educate staff nurses and students about the FAST HUGS BID checklist.
- It also helps the nursing administrator to check the infection ratio in ICU and plan for prevention of infection.

Nursing Education
- The results of the study can be used by the nurse instructor to prepare resources pertaining to the FAST HUGS BID checklist.
- Nurse educator can organise education programme on FAST HUGS BID checklist for staff nurses and students.

Nursing Research
- Evidence-based practice in nursing can be integrated by the nurse researcher.
- The methodology can be adopted by nurse researchers in future studies.

Limitation
- The findings of the study could not be generalised because of time constraints, small sample size and limited area of setting.
- Lack of control group

Recommendations

- The study can be conducted using additional domains, such as critical care unit practice.
- ICU staff nurses in a hospital setting could be participants of a similar study.
- To determine the major difference, a comparable study can be carried out in a different location.
- The study can be undertaken with a larger sample to have a better generalisation
- The same study can be with an experimental research approach having a control group.

REFERENCES

1. Kumar J, Gholap M, B Mahesh, Chendake, Mohite N, et.al. To assess the effectiveness of self-instructional module on knowledge of staff nurses regarding FAST HUGS BID on critically ill patients in tertiary care hospital at Karad. International journal of advanced science and technology (IJAST). Dec 2023; 29(7):4215-29.Available from: http://sersc.org/journals/index.php/IJAST/article/view/23195.

2. Deepa V. Journal of Emerging Technologies and Innovative Research (JETIR). Jan 2021; 8 (1):1109-1113. Available from: www.jetir.org.

3. Jean-Louis Vincent. Critical Care Medicine. 2005; 33(6):1225-1229. Web site www.ccmjournal.org.

4. Sharma K. FAST HUGS BID and Its Components. Knowledge and Practice among Staff Nurses in ICU- Narrative Review Section. A-Research pape DOI: - 10.48047/ecb/2023.12.si5a.0282.

5. Vaidyal M, Kolhe K. A study to assess the effectiveness of structured teaching program on knowledge of FASTHUGBID among students nurses in selected nursing colleges of Surat city. International Journal of All Research Education and Scientific Methods (IJARESM). June 2022; 10(6):429. Available online at: www.ijaresm.com.

6. Rathod P, Suneesh P, Doss J K. Asian J. Effectiveness of structured teaching programme regarding FAST HUGS BID in improving patients care and safety of critically ill patients among staff nurses working in ICU set-Ups in selected Hospitals. Nursing Education and Research. 2019; 9(4):509-511. Available on: https://ajner.com/AbstractView.aspx?PID=2019-9-4-9.

7. Prachi C, Sherekar , Mahesh B, Chendake, Mohite V, Manisha Gholap, et al. Journal of critical reviews. 2020; 7(08):

8. Kouchek, Mehran Arabzadeh, Behnam, Nooraei, Navid, Fathi, et al. Evaluation of the FAST HUG implementation effect on the mortality and length of stay in admitted patient in Intensive Care Unit (ICU) of a hospital. Journal of Contemporary Medical Sciences. 2023; 9(10):1341.

9. Rebika T, Solanki S, Aleena MS, Shukla A, Ravi D, George J, et al. A Study to Assess the Knowledge and Practice Regarding Fast Hugs Bid Among ICU Staff Nurses in a Selected Hospital of New Delhi. J Clin Med Res. 2024; 6(3):342-7. DOI: https://doi.org/10.37191/Mapsci-2582-4333-6 (3)-159.

10. Vidya M. Impact of integrated training programme on cognizance and execution regarding FAST HUGS BID in critical care units among nursing officers from selected hospitals of Mysuru.2018.

11. Magnan, G, Vargas, R, Lins, L.et al. Crit Care. FAST HUG in an ICU at a private hospital in Brasília: checklist and the eighth evaluation item.2009; 13(3):1. Available form https://doi.org/10.1186/cc7803.

12. Seo, Dong-min, Heo, Inhae, Moon, Jonghwan, Kwon, Junsik, Huh, Yo, Kang, Byung Hee and Song, et al. Implementation of the 'Fast Hugs Bid' Checklist Improves Clinical Outcomes in the Trauma Intensive Care Unit.A Retrospective Observational Study. SSRN. Available at SSRN: http://dx.doi.org/10.2139/ssrn.4601908.

13. Fernández C, Miguel J, Monestel E Z, Josué Murillo-Cubero, José Pablo Díaz-Madriz, Brayan Leiva-Montero, Sebastián Arguedas-Chacón, et al. The Pharmacist's Role in the Implementation of FASTHUG-MAIDENS, a Mnemonic to Facilitate the Pharmacotherapy Assessment of Critically Ill Patients. A Cross-Sectional Study.2022; 10(4):74. https://doi.org/10.3390/pharmacy10040074.

14. Kaewpaung, Jansook N. Journal of MCU. (2023). the development of nursing care model for surgical critically ill patients based on the FAST HUGS BID concept. Journal of MCU. 2023; 10(1):321–336.

15. Zincircioglu C, Yaman G, Köse I, Zerey Albayrak M, Uzun U, Sarıtaş A, Şenoglu N. Yoğun bakım hastalarında. Etkinliği

Tepecik Eğit ve Araşt Hast. Dergisi. FAST HUGS WITH ICU 2020; 30(1):53-61. doi:10.5222/terh.2020.99810.

16. Papadimos, T.J, Hensley, S.J, Duggan, J.M. et al. Implementation of the "FASTHUG" concept decreases the incidence of ventilator-associated pneumonia in a surgical intensive care unit. Patient Saf Surg. 2008; 2(3).

17. Guttormson JL, Chlan L, Tracy MF, Hetland B, Mandrekar J. Nurses' Attitudes and Practices Related to Sedation A National Survey. Crit Care. July 2019; 28(4):255-263.

18. Tsige Hadera, Tigist Worku, Wagari Tuli. Nurses´ Knowledge, Practice, and Associated Factors with Enteral Nutrition in Adult Intensive Care Units of Public Hospitals in Addis Ababa, Ethiopia: A Cross-sectional Study. Ethiop J Health Sci. 2022; 32(2):423. Available form http://dx.doi.org/10.4314/ejhs.v32i2.23.

19. Fuentes Padilla P, Martínez G, Vernooij RW, Urrútia G, Roqué I Figuls M, Bonfill Cosp X. Early enteral nutrition (within 48 hours) versus delayed enteral nutrition (after 48 hours) with or without supplemental parenteral nutrition in critically ill adults. Cochrane Database System Rev.2019;10:

20. Nair AS, Naik VM, Rayani BK. FAST HUGS BID: Modified mnemonic for surgical patient. Indian Journal of Critical Care Medicine. 2017; 21:7134.