CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
SJIF Impact Factor: 7.187

Available online at: http://www.iajps.com *Research Article*

ASSESSMENT OF KNOWLEDGE REGARDING BASIC LIFE SUPPORT AMONG NURSES OF PUNJAB INSTITUTE OF CARDIOLOGY, LAHORE

[1]Shafqat Jabeen, [2]Asia Miraj, [3]Tahira Shaheen

[1]Charge Nurse, Punjab Institute of Cardiology, Lahore., Email ID: jabeenshafqat@gmail.com., [2]Charge Nurse, Punjab Institute of Cardiology, Lahore, Email ID: ashiafridi58@gmail.com., [3]Nursing Instructor, Post Graduate College of Nursing Punjab Lahore, Pakistan, Email ID: ushnahamna@gmail.com

Article Received: July 2021 **Accepted:** August 2021 **Published:** September 2021

Abstract:

Introduction: *Basic life support (BLS) is a life saving manuveur that identifies cessation of heartbeat and performing cardio pulmonary resuscitation (CPR) techniques to revert the hemodynamic status until proper recovery or transportation to an advanced cardiac life support facility. Therefore it is imperative that all the nurses should possess adequate knowledge about the basic life support guidelines.*

Methods: *A descriptive cross-sectional study was conducted among 100 nurses working in Punjab Institute of Cardiology during September 2019 and December 2019. Purposive sampling using self- structured questionnaire was implied for data collection.*

Results: *Majority (52%) of the respondents were between 20 to 25 years of age. 62% of respondents had basic diploma of nursing , 34 % of bachelor of science in nursing and 4% possessed Post Graduate Degree. 67% respondents had working experience of 5-10 years and 33% of 10-15 years and above.*

Discussions: *97% respondents had heard about BLS before in their lifes but 84% of them had never attended any BLS training. Most of the respondents (92 %) had seen CPR being done and more than half of the respondents (68%) had done CPR. 72% stated circulation, airway and breathing as the latest CPR sequence. 92% of the respondents said cardiac arrest is the indication of CPR. 46 % had inadequate knowledge, 42% had moderate knowledge while minority 12 % had adequate knowledge on Basic Life Support.*

Conclusion: *Majority of the nurses working in Punjab Institute of Cardiology possess inadequate knowledge regarding Basic Life Support. There was also no association between the knowledge and academic qualification or experience.*

Keywords: *Basic Life Support; cardio pulmonary resuscitation; cardiac arrest*

Corresponding author:

Shafqat Jabeen,

Charge Nurse, Punjab Institute of Cardiology, Lahore.

Email ID: jabeenshafqat@gmail.com

QR code

Please cite this article in press Shafqat Jabeen et al, ***Assessment Of Knowledge Regarding Basic Life Support Among Nurses Of Punjab Institute Of Cardiology, Lahore.,*** *Indo Am. J. P. Sci, 2021; 08(9).*

INTRODUCTION:

Basic life support (BLS) is a life saving procedure performed in an emergency situation after identifying a cardiac arrest and initiating proper Cardiac Pulmonary Resuscitation (CPR) techniques until the until victims either regains normal sinus rhythm and respiration or is shifted to an advanced cardiac life support facility [1]. Resuscitation is apparently a magical skill of for restoration of heart beat in dead looking patients [2]. BLS constitutes reassurance of airway, breathing and circulation. Loss of circulation for more than 3 minutes may lead to irreparable brain injury. Cardiac arrest is an life threatening acute emergency situation with high incidence of mortality, however if early chest compressions and mouth to mouth breathing can dramatically improve the survival rates. BLS know how is therefore the crucial determinant of the positive outcome of the resuscitation [3]. Among all the healthcare professionals nurses form the first line of response to any cardiac collapse occuring in the hospital settings and are expected to mobilize the response cardiac support team. Therefore the nurses ought to posseess latest technical and professional skills to perform the needful when required [4]. It is a time tested and proven fact that a urgent CPRization can dramatically defy the ensuing mortality. The benefits of the procedure can only be obtained if performed in a systematic and energetic manner [5,6]. There has been a rising trend of the medical and non medical people attending the BLS courses worldwide so that they can learn the life saving mechanisms to safe the humanity. However, among the developing countries like Pakistan BLS is not in fashion yet. There is only a scanty published data available to assess the knowledge regarding BLS. Severel deficiencies have been highlighted and corrected regarding the sequential peformance of BLS in the latest guidelines [7].

METHODS:

A descriptive cross-sectional study was conducted among 100 nurses working in Punjab Institute of Cardiology during September 2019 and December 2019. Purposive sampling using self- structured questionnaire was implied for data collection.

RESULTS:

Majority (52%) of the respondents were between 20 to 25 years of age. 62% of respondents had basic diploma of nursing , 34 % of bachelor of science in nursing and 4% possessed Post Graduate Degree. 67% respondents had working experience of 5-10 years and 33% of 10-15 years and above. 97% respondents had heard about BLS before in their lifes but 84% of them had never attended any BLS training. Most of the respondents (92 %) had seen CPR being done and more than half of the respondents (68%) had done CPR. 72% stated circulation, airway and breathing as the latest CPR sequence. 92% of the respondents said cardiac arrest is the indication of CPR. 46 % had inadequate knowledge, 42% had moderate knowledge while minority 12 % had adequate knowledge on Basic Life Support.

Table 1: Association between Knowledge and Qualification of the Respondents

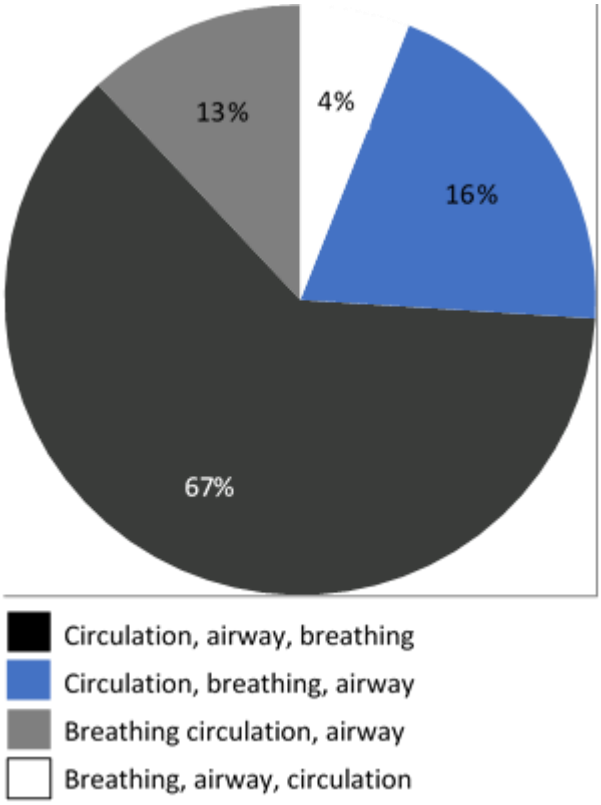
Qualification	Inadequate	Moderate/Adequate	Adequate	Total
Diploma	33 (55.22%)	23 (37.09%)	6 (9.6%)	62
BSc	12 (35.29%)	17 (50.0%)	5 (14.70%)	34
Post-Graduation	1 (25.0%)	2 (50.0%)	1 (25.0%)	4
Total	46 (46.0%)	42 (42.0%)	12 (12.0%)	100

Table.2 Association between knowledge and work experience of the respondents

Experience	**Knowledge**		
Years	**Inadequate**	**Moderate**	**Total**
1-3 years	18(60.0%)	12 (40.0%)	30
3-6 years	20 (68.96%)	9 (31.03%)	29
6-9 years	12 (75.0%)	4 (25.5%)	16
>9 years	15 (60.0%)	10 (40.0%)	25
Total	65 (65.0%)	35 (35.0%)	100

67% said that conscious level is confirmed by shaking the patient vigorously and yelling Whats your name? “Are you Okay?,” 66% said carotid pulsations are assessed to confirm the circulation and 74% of the respondents answered chest compressions are initiated if carotid pulsations are absent greater than 10

seconds. 71% of the respondents said pinch nostrils, take a deep breath and blow into victim's mouth to establish respiratory aid whereas only 29 % of the respondents said to blow directly into collapsed patients mouth. 59% answered 1 breath is delivered every 5 seconds to continue mouth to mouth breathing, till normal respiratory effort is resumed and 92% respondents stated that cardiac arrest is an absolute indication for CPR; only 8 % of the respondents mentioned absence of breathing. 93% of the respondents documented that CPR should be done in a supine position on a firm flat surface, 60% of the respondents said xiphisternal compressions, 25% said mid chest, 12% said left side of chest and 3% said right side of the chest should be compressed during an effective CPR . 83 % said 30:2 , only 17 % of the respondents said 30:1 to be the recommended ratio of CPR. 82% of the respondents said heel of one hand interlocked over the other is the most suitable format for delivering chest compressions, and 80% said that carotid pulsations to be checked after every 4 cycles of CPR. 84% said carotid pulse and 16% said radial pulse should be checked to assess the successful outcome of CPR. The sequence of CPR as said by participants is shown in figure 1. 46% of participants had inadequate knowledge, 42 % had moderate knowledge and only 12 % had adequate knowledge about BLS.



DISCUSSION:

Almost 67% of the respondents stated that the latest guidelines for the CPR are circulation, airway and breathing which is contrary to the one founded by Sharma & Attar[7,8]. Only 44% of the respondents considered that CPR is the first line of response in victims with unremarkabe vitals. while 4 % of the respondents were of the opinion to wait and watch while 20 % of the respondents said to keep the person in left lateral position. Regarding correct technique to clear airway ,74% of the respondents said head tilt, chin lift or jaw thrust which was identical to results formulated by Parajulee & Selvaraj5. 78% of the respondents stated there should be ateleast 100 compressions per min for a successful CPR which is contrary to the results compiled by Parajulee & Selvaraj5. 69% of the respondents said that the depth of compression during CPR should be 1.5-2 inches which is similar to the values of Sharma & Attar8 but was opposed with the study done by Shekhawat & Chauhan2, Parajulee & Selvaraj[5] ,Chew, et. al. 83% of the respondents said to perform CPR in 30:2 as single rescuer which was inconsistent with the study done by Shekhwat & Chauhan2, and Parajulee & Selvaraj[5], whereas only 17 % of the respondents said 30:1. 97% said rib fracture as a complication of

aggressive CPR which was opposed with the study done by Parajulee & Selvaraj5.No statistically significant (P<0.001) association was found between knowledge of BLS with educational qualification and work experience (Table 1 & 2).

CONCLUSION:

Most of the nurses working in PIC Lahore do not possess adequate knowledge about Basic Life Support and CPR. Only 2% had Adequate knowledge about cardiopulmonary resuscitation. There was no Association between the knowledge and years/type of qualification or work experience.

REFERENCES:

1. P h i p p s , W. J . , M e d i c a l S u r g i c a l Nursing:Health and illness prospectives. 2003: Mosby
2. Shekhawat, K., & Chauhan, A. Available on: (2014) Knowledge of Basic Life Support Among the Interns and Postgraduate Students of Dental Colleges in Banglore City, Karnataka International Journal of Health Sciences and Research Volume, 158-166
3. Reddy, S., et al., Awareness of Basic Life Support among the staff and students in a Dental School. Journal of Contemporary Dental Practice, 2013. 14(3): p. 511-517.http://dx.doi.org/10.5005/jpjournals-10024-1353
4. Lima, S.G., et al., Permanent education in BLS and ACLS: Impact on the knowledge of nursing professionals. Arquivos Brasileiros de Cardiologia 2009. 93(6).
5. Parajulee, S. and V. Selvaraj, Knowledge of Nurses Towards Cardio-pulmonary Resuscitation in a Tertiary Care Teaching Hospital in Nepal. Journal of Clinical and Diagnostic Research, 2011. 5(8): p. 1585-1588.
6. Choi, H.S., et al., Peer-assisted learning to train high-school students to perform basic life support. World Journal of Emergncy Medicine, 2015. 6(3): p. 186-190. http://dx.doi.org/10.5847/wjem.j.1920-8642.2015.03.004
7. 7 . S h r e s t h a , R . , e t a l . , B a s i c l i f e support:knowledge and attitude of medical/paramedical professionals. World Journal of Emergency Medicine, 2012. 3(4): p. 141-145.
8. Sharma,R & Attar, N. R.,Adult Basic Life Support (BLS) awareness and knowledge among medical and dental interns completing internship from Deemed University. Nitte University Journal of Health Science,20122(3),6-13.
9. Chew,K.,et al., A survey on Knowledge, Attitude and Confidence level of Adult Cardiopulmonary Resuscitation among junior doctors. Medical Journal of Malaysia, 201166 (1),56-59.