Survey: Anesthesiologists' Knowledge, Perception, and Attitude Toward BLS, ACLS, and PALS

You are being invited to participate in a survey aimed at evaluating anesthesiologist's knowledge, perceptions, and attitudes toward Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS), and Pediatric Advanced Life Support (PALS). Your participation in this survey is voluntary. All responses will remain confidential and anonymous.

Introduction:

You are invited to participate in a survey assessing your Knowledge, Perception, and Attitude toward Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS), and Pediatric Advanced Life Support (PALS). This survey is divided into five sections. All questions pertain to current AHA guidelines (American Heart Association standards) and typical anesthesiologist practice expectations. Please follow the instructions for each section and answer every question as accurately and honestly as possible. Your responses will help us evaluate training needs and improve resuscitation practices.

If you have any questions or concerns regarding this survey, please do not hesitate to contact the

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* Indicates required question

1. I consent: (Proceed with the survey) *

Mark only one oval.

- ◯ Yes
- ◯ No

Section I: General demographic question

2. Age (in years) *

_____

3. Gender: *

Mark only one oval.

- ◯ Male
- ◯ Female
- ◯ Prefer not to say

4. What city do you practice in? *

_____

5. 1. Qualification (Select more than one if it applies): *

Check all that apply.

- ☐ MBBS
- ☐ FCPS
- ☐ MCPS
- ☐ DA
- ☐ FRCA
- ☐ American Diplomat
- ☐ Others

6. Position: *

Mark only one oval.

- Junior Resident (Level I, II)
- Senior Resident (Level III, IV)
- Medical Officer
- Senior Medical Officer
- Fellow
- Consultant

7. Do you have a valid AHA/ERC certification (Select more then one if it applies) *

Check all that apply.

- [ ] BLS
- [ ] ACLS
- [ ] PALS
- [ ] No

8. If not, have you ever attended AHA/ERC certified courses in the last 5 years (Select more than one if it applies) *

Check all that apply.

- [ ] BLS
- [ ] ACLS
- [ ] PALS
- [ ] Never attended

9. What is your specialty? *

Check all that apply.

- [ ] General Anesthesia
- [ ] Pediatric Anesthesia
- [ ] Cardiac Anesthesia
- [ ] Neuro Anesthesia
- [ ] Critical Care Anesthesia
- [ ] Pain Management
- [ ] Others

10. Years of practice in Anesthesiology? *

Mark only one oval.

- ◯ < 2 years
- ◯ 3-5 years
- ◯ 6-10 years
- ◯ 11-15 years
- ◯ >15 years

11. Type of Hospital you are employed by (Select more then one if it applies) *

Mark only one oval.

- ◯ Government
- ◯ Private
- ◯ Semiprivate
- ◯ University/academic Hospital
- ◯ Non-academic Hospital
- ◯ District Hospital
- ◯ Community Hospital/ Secondary

12. Do you work in the ICU with Anesthesiology? *

Mark only one oval.

- Yes
- No

13. In what type of ICU do you provide critical care in? *

Check all that apply.

- [ ] Surgical ICU
- [ ] Medical ICU
- [ ] Medical-Surgical Mix ICU
- [ ] Cardiac Surgical ICU
- [ ] Pediatric ICU
- [ ] NA
- [ ] Others

14. The population of critically ill patients you manage? *

Mark only one oval.

- Adult
- Pediatrics
- Both

15. Beds in your primary Intensive Care unit? *

Mark only one oval.

- less than 10 beds
- 11-20 beds
- 21-30 beds
- 31-40 beds
- >40 beds

Section II: Knowledge Assessment (BLS, ACLS, PALS)

Instructions:

This section contains multiple-choice questions to assess your knowledge of BLS, ACLS, and PALS guidelines. There are 12 questions (4 questions for each of BLS, ACLS, and PALS). Please select the **best answer** for each question. **Each correct answer is worth 1 point** toward your knowledge score.

16. According to current BLS guidelines, what is the recommended sequence of steps for an unresponsive adult in cardiac arrest? *

Mark only one oval.

- Airway → Breathing → Circulation (ABC)
- Breathing → Airway → Circulation (BAC)
- Circulation → Airway → Breathing (CAB)
- Airway → Circulation → Breathing (ACB)

17. What is the recommended chest compression rate for high quality adult CPR? *

Mark only one oval.

- 80–100 compressions per minute
- 100–120 compressions per minute
- 130–150 compressions per minute
- At least 150 compressions per minute

18. What is the recommended chest compression depth for an adult victim during CPR? *

Mark only one oval.

- At least 2 inches (approximately 5 cm)
- At least 1 inch (approximately 2.5 cm)
- At least 4 inches (approximately 10 cm)
- About one-third of the chest diameter

19. After delivering a shock with an AED to an adult patient in cardiac arrest, what is the next immediate action according to BLS protocol? *

Mark only one oval.

- Resume chest compressions immediately
- Administer intravenous epinephrine
- Check the patient’s pulse to see if the shock restored circulation
- Deliver a second shock if the first shock did not revive the patient

20. What is the recommended initial energy setting for defibrillation of an adult in ventricular fibrillation using a biphasic defibrillator (per current ACLS guidelines)?

Mark only one oval.

- 360 Joules
- 120-200 Joules
- 100 Joules
- 50 Joules

21. In the operating room, a patient becomes pulseless, and the cardiac monitor shows asystole (flat line). According to ACLS guidelines, which of the following should be done first? *

Mark only one oval.

- Begin high-quality CPR and administer epinephrine as soon as possible
- Deliver an immediate unsynchronized shock (defibrillation)
- Perform a precordial thump
- Administer atropine 1 mg IV

22. According to the ACLS bradycardia algorithm, what is the first-line medication for an adult with symptomatic bradycardia? *

Mark only one oval.

- Epinephrine 1 mg IV push
- Atropine 1 mg IV bolus
- Initiate transcutaneous pacing
- Adenosine 6 mg IV push

23. During an adult cardiac arrest resuscitation, an advanced airway is successfully placed (endotracheal tube). How should ventilation be performed now? *

Mark only one oval.

- Continue cycles of 30 chest compressions and 2 breaths
- Provide 1 breath every 6 seconds while continuous chest compressions are ongoing
- Give 10 breaths per minute, synchronized with every 10th chest compression
- Pause compressions for 5 seconds to deliver 2 breaths each minute

24. What is the correct compression-to-ventilation ratio for 2-rescuer CPR on an infant or child (according to PALS guidelines, excluding newborns)? *

Mark only one oval.

- 30 compressions: 2 breaths
- 15 compressions: 2 breaths
- 20 compressions: 2 breaths
- 3 compressions: 1 breath

25. In pediatric advanced life support, what is the initial recommended defibrillation energy dose for a child in ventricular fibrillation? *

Mark only one oval.

- 2 joules per kilogram
- 4 joules per kilogram
- 0.5 joules per kilogram
- 10 joules per kilogram

26. What is the recommended IV/IO dose of epinephrine for a pediatric cardiac arrest (for example, in asystole or pulseless arrest)? *

Mark only one oval.

- 0.01 mg/kg per dose
- 1 mg total (fixed dose)
- 0.1 mg/kg per dose
- 2 mg per dose

27. A 7-year-old child under general anesthesia develops severe bradycardia (heart rate <60 bpm) with signs of poor perfusion, despite adequate oxygenation and ventilation. According to PALS guidelines, what is the next recommended step? *

Mark only one oval.

- Begin chest compressions immediately
- Administer atropine IV
- Administer epinephrine IV
- Perform endotracheal intubation

Section III: Perception, Importance, and Self-Confidence

In this section, we would like to understand your perceptions regarding resuscitation training and skills. Please indicate your level of agreement with each of the following statements, using a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Select the number that best reflects your opinion for each statement. (If a statement does not directly apply to your current practice, respond based on your general belief or experience.

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral/Unsure, 4 = Agree, 5 = Strongly Agree.

Please rate your agreement with the following statements:

28. Regular BLS training (basic life support certification and refreshers) is important for my practice as an anesthesiologist.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

29. Regular ACLS training (basic life support certification and refreshers) is important for my practice as an anesthesiologist.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

30. Regular PALS training is important for anesthesiologists who provide care to pediatric patients.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

31. I feel confident in performing basic life support (e.g., high-quality CPR) in an emergency.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

32. I feel confident leading or actively participating in an adult cardiac arrest resuscitation (ACLS scenario) when it occurs

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

33. I feel confident in my ability to participate in a pediatric resuscitation (PALS scenario) if the need arises.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

34. I believe my current knowledge of BLS, ACLS, and PALS protocols is up to date (current with the latest guidelines). *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

Section IV: Attitude, Willingness, and Beliefs about Training

Instructions:

This section addresses your **attitudes** toward life support training and its value. Using the **same 1 (Strongly Disagree) to 5 (Strongly Agree) scale**, please indicate your level of agreement with the statements below. These items explore your willingness to engage in training and your beliefs about the effectiveness of BLS/ACLS/PALS training.
Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral/Unsure, 4 = Agree, 5 = Strongly Agree.

Please rate your agreement with the following statements:

35. I am willing to attend BLS refresher courses or re-certification training on a regular schedule (for example, every two years as required). *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

36. I am willing to attend ACLS refresher courses or re-certification training on a regular schedule (e.g., every two years). *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

37. I am willing to undergo PALS refresher or re-certification training when it is relevant to my patient population (e.g., if I am involved in pediatric anesthesia or pediatric emergencies). *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

38. I believe that regular BLS training for all healthcare providers leads to better patient outcomes during cardiac emergencies.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

39. I believe that strict adherence to ACLS protocols and algorithms improves a patient's chances of survival in an adult cardiac arrest. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

40. I believe that PALS training and following pediatric resuscitation protocols improve outcomes in pediatric cardiac arrest situations. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

41. I would participate in additional voluntary life support training (such as simulation drills or mock codes) beyond the mandatory requirements to further improve my resuscitation skills. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

Section V: Barriers

42. What barriers prevent you from regularly updating or completing BLS, ACLS, or PALS certification or recertification? *(Select all that apply)* *

Mark only one oval per row.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
High cost of certification or renewal courses					
Not a mandatory requirement at my institution					
Limited availability of AHA-accredited training centers/slots					
Language barrier (difficulty understanding course material or exams)					
Busy clinical schedule/Workload					
Time constraints					
Lack of institutional support					
Lack of awareness that it has to be renewed every two weeks					
Fear of failure/ performance anxiety					
Lack of motivation					

End of survey

Thank you for completing the survey.
Your input is valuable in assessing our department’s preparedness and in guiding future training initiatives. Your scores and responses will remain confidential and will be used to improve BLS/ACLS/PALS training programs for our anesthesiology team

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