

Basic Life Support Instructor Manual

for Ministry of Health Malaysia



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Basic Life Support Instructor Manual
for Ministry of Health Malaysia
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Contents

vi | List of
Abbreviations

Chapters

	2-7
01. Introduction	
02 . Principles of Adult Learning in BLS Course	8-11
03 . Preparing for The BLS Course	12-21
04 . Assessment And Remedition	22-26

Appendices

28-30	Appendix 1: Recommendation by NCORT on Education, Implementation of the Resuscitation Training in MOH Hospitals
31-32	Appendix 2 : Registry of the Participants
33	Appendix 3 : Floor Plan Layout
34	Appendix 4 : Layout of Skill Stations
35	Appendix 5 : Equipments
36	Appendix 6 : Certificates
37	Appendix 7 : MOH NCORT 2015 BLS HCP Checklist (Station: One man CPR)
38	Appendix 8 : MOH NCORT 2015 BLS HCP Checklist (Station: Two man CPR)
39	Appendix 9 : MOH NCORT 2015 BLS HCP Checklist (Station: Infant CPR)
40	Appendix 10 : MOH NCORT 2015 BLS HCP Checklist (Station: Adult Choking)
41	Appendix 11 : MOH NCORT 2015 BLS HCP Checklist (Station: Infant Choking)
42	Appendix 12 : MOH NCORT 2015 BLS HCP Checklist (Station: AED (Automated External Defibrillator))

References | 44

46 | **Technical Committee**

Secretariat | 50



Foreword

by Director General of Health

KEMENTERIAN KE

FOREWORD



Basic Life Support Subcommittee under the National Committee on Resuscitation Training developed the Basic Life Support Training Manual in 2017.

Apart from that, the Basic Life Support Subcommittee organizes Basic Life Support Instructor Course every year to ensure the quality of teaching and to standardize the training according to the NCORT recommendation.

In May 2019, the BLS Subcommittee has come out with the Basic Life Support Instructor Manual to be used as a guidance and reference to all Basic Life Support Instructors in Malaysia on how to organize the Basic Life Support Provider Course.

I would like to congratulate the Basic Life Support Subcommittee and National Committee on Resuscitation Training, Ministry of Health Malaysia for their efforts and commitments for producing this Instructor Manual.

Thank you.

Datuk Dr. Noor Hisham Bin Abdullah

Director-General Of Health
Ministry of Health Malaysia



List of
Abbreviations

AED	AUTOMATED EXTERNAL DEFIBRILLATOR
AHA	AMERICAN HEART ASSOCIATION
ALS	ADVANCED LIFE SUPPORT
BLS	BASIC LIFE SUPPORT
BMV	BAG MASK VENTILATION
CPR	CARDIO PULMONARY RESUSCITATION
EMS	EMERGENCY MEDICAL SYSTEM
ERS	EMERGENCY RESPONSE SYSTEM
FBAO	FOREIGN BODY AIRWAY OBSTRUCTION
HCW	HEALTH CARE WORKER
IHCA	IN-HOSPITAL CARDIAC ARREST
ILCOR	INTERNATIONAL LIAISON COMMITTEE ON RESUSCITATION
MECC	MEDICAL EMERGENCY COORDINATING CENTRE
MERS	MALAYSIA EMERGENCY RESPONSE SYSTEM
MOH	MINISTRY OF HEALTH
NCORT	NATIONAL COMMITTEE ON RESUSCITATION TRAINING
OHCA	OUT-OF-HOSPITAL CARDIAC ARREST
PPE	PERSONAL PROTECTIVE EQUIPMENT
ROSC	RETURN OF SPONTANEOUS CIRCULATION
RRT	RAPID RESPONSE TEAM
VF	VENTRICULAR FIBRILLATION
VT	VENTRICULAR TACHYCARDIA

Chapter

1.0

Introduction

2.0

Principles of Adult Learning in BLS Course

3.0

Preparation for BLS Course

4.0

Assessment and Remediation



Introduction

1.0 Introduction

1.1 Course Goal

The goal of BLS is to train participants to save lives of victims in cardiac arrest through high-quality Cardiopulmonary resuscitation (CPR). The National Committee On Resuscitation Training designed the BLS course to teach healthcare professionals how to perform high quality CPR individually or as part of a team.

1.2 Learning Objectives

- 1.2.1 Recognize the signs of someone needing CPR.
- 1.2.2 Describe all of the steps and apply the BLS concepts of the Chain of Survival.
- 1.2.3 Describe and perform high-quality CPR and its impact on survival
- 1.2.4 Describe and demonstrate the importance of early and appropriate use of an automated external defibrillator (AED).
- 1.2.5 Provide effective ventilation by using a barrier device.
- 1.2.6 Describe and perform the technique for relief of foreign-body airway obstruction.
- 1.2.7 Describe the importance of an effective team in multi-rescuer Resuscitation.

1.3 BLS Instructor

- 1.3.1 Must be certified in the NCORT provider course.
- 1.3.2 Must have attended any NCORT-accredited instructor training course OR has been conducting BLS Provider Course for at least once a year and certified by NCORT BLS Subcommittee after being advised by the Course Director of the training centre.
- 1.3.3 Tagging Instructor

1.4 Critical Roles of the Instructor.

The instructor is critical to successful student outcomes. During the course, the instructor should.

- 1.4.1 Ensure that students demonstrate high-quality CPR and other principles of care consistent with the current NCORT Guideline.
- 1.4.2 Facilitate instructor-led discussions with a focus on desired outcome
- 1.4.3 Listen to students' responses and provide feedback to ensure understanding of learning concepts
- 1.4.4 Observe students' actions and coach as needed
- 1.4.5 Give positive or corrective feedback
- 1.4.6 Keep discussions and simulations on track for optimal learning and use of time in the classroom
- 1.4.7 Conduct structured debriefing sessions after each simulation

1.5 Educational Design

The BLS Course is designed for healthcare providers caring for patients both in and out of the hospital setting.

1.5.1 Instructor-led training:

- 1.5.1.1 This option is led by an instructor in a classroom setting.
- 1.5.1.2 Instructors deliver courses designed to include both the cognitive portion of training and the psychomotor component of thorough skills practice and testing.

1.5.2 Blended Learning

- 1.5.2.1 The online component of the blended-learning experience benefits both students and instructor. Online learning accommodates many different learning styles. For example, some students prefer learning in a self-directed environment as opposed to a group setting.

1.6 Course Audience

This course is designed for health care provider in a wide variety of settings and need CPR training to enter into a health career-related training program.

1.7 Course Flexibility

Instructors to tailor the BLS Course to meet audience-specific needs.

Consider these examples:

1.7.1 If you are teaching this course to staff at a children's hospital, you might want to include extra practice time on infant and child manikins.

1.7.2 You may choose to adapt situations to the specific location.

1.8 Course programme

Time	Programme
0800-0815	Registration
0815 - 0835	Introduction to Basic Life Support
0835 - 0915	Video / lecture
0915 - 0930	Tea Break
0930 - 1130	Simultaneous CPR skill station
1130 - 1300	Practical Assessment
1300 - 1400	Lunch
1400 - 1530	Defibrillation / AED and mask ventilation
1530 - 1600	MCQ
1600 - 1700	Practical Session Revision and Debriefing

1.9 Course programme

For further reference of education and implementation of the resuscitation training in MOH hospital refer as per appendix 1

1.10 Debriefing

1.10.1 Definition of Debriefing

During BLS you will debrief the students on what happened, how issues were addressed, and outcomes. Structured

and supported debriefing is an organised, evidence-based, student-focused process that takes place in a non-threatening environment. It is a method of assisting students in thinking about what they did it, why and how they did it, and how they can improve. In an effective debriefing session, instructors ask questions and encourage students to analyze their own performance, rather than offer only the instructor's perspective.

Because this approach is focused on what the student thinks and does rather than on the instructor's view point, students are more likely to remember and apply the lessons in their practice.

1.10.2 Feedback Versus Debriefing

Simple feedback is typically geared toward correcting student action the instructor has observed.

Effective debriefing, on the other hand, focuses more on understanding why students performed a certain way, which allows correction on their thinking.

1.10.3 Effective Debriefing Characteristics

The characteristics of an effective debriefing session include

1.10.3.1 Active participation

1.10.3.3 Learner discussion

1.10.3.3 Self-analysis

1.10.3.4 Application

1.10.3.5 Thorough processing of information

1.10.4 With effective debriefing, students should

1.10.4.1 Analyze and evaluate what happened

1.10.4.2 Recognize how tools can help them manage situations

1.10.4.3 Develop the habit of self-critique

A close-up photograph of several hands stacked on top of each other in a supportive gesture. The hands are of various skin tones, and the background is softly blurred, showing what appears to be a person's face and a patterned shirt. The overall tone is warm and encouraging.

Principles of Adult Learning in BLS Course

2.0 Principles of Adult Learning in BLS Course

Training of BLS should be based on the Principles of Adult Learning. The principles are described as below:

2.1 Life-Experience Based

Adults require instruction and information given to them to be closely related to their own real life experiences.

2.2 Goal-Oriented

Adult learners usually come to class with certain expectations. They have goals and expectations and the instructor needs to relate to them to reach those goals.

2.3 Mature

Adult learners develop more defined expectations and interests that are often associated with their careers

2.4 Demand Relevance

Adult learners usually want the subject matter to be highly relevant to their personal or professional lives. They are generally intolerant of information they cannot apply. They also want to be able to apply the subject matter immediately

2.5 Selective

An adult learner wants to be given choices, and to be able to pick from a variety of learning methods.

2.6 Enjoy Recognition

Adult learners want to be treated as independent mature individuals who are capable of making decisions about their learning.

2.7 Require Constant Encouragement

Adults enjoy external recognition of their accomplishments, but still want encouragement to continue and progress.

2.8 Focused on Career Issues

Many of the reasons why adults continue learning centre around their career. Therefore they expect the teaching and support structures to be geared toward that career. The knowledge and skills relate directly to their careers.

2.9 Seek Return on Investment

Adult learners want a return on their investment. They want to feel that they have been appropriately rewarded for their sacrifice of time and resources.

2.10 Seek an Interactive Environment

Adult learners value group interaction. They feel they can learn as much from interacting with other students as they can from the teacher.

2.11 Self-Directed

Most adult learners are self-motivated. Therefore, we are seeing a trend toward self-paced multimedia instruction.

2.12 Seek Enjoyment

Adults need to be satisfied that the learning process brings enjoyment. They expect to interact with peers, instructors and others in a non-threatening atmosphere.

2.13 Seek Social Interaction

Adults are social beings and want learning to foster this attribute. They enjoy sharing experiences with their peers and instructors.

2.14 Protect Self-Image

The strength of an adult's self-image influences his or her ability to learn. Adults with low self confidence have low expectations. They are easily threatened, and this often leads to poor learning. Conversely, those with high self-confidence have high expectations and are confident about their chances of success.

A close-up photograph showing a person's hands performing CPR on a mannequin. The person's hands are positioned on the mannequin's chest, and another person's hands are visible, likely an instructor, guiding the process. The background is blurred, showing a person in a blue and white patterned shirt. The overall scene is brightly lit, suggesting an indoor training environment.

Preparation for BLS Course

3.0 General Preparation

- 3.0.1 Conducting BLS provider course requires a multi-disciplinary team approach. Call letters for the release of instructors and participants are best issued by the Hospital Director and directed to the respective Heads of Department.
- 3.0.2 An efficient secretariat is important to ensure a sustainable training programme.
- 3.0.3 It is important to develop and maintain a core group of instructors who are committed. Attention must be given to train new instructors to ensure a constant but adequate pool of instructors.
- 3.0.4 If you are conducting the BLS Provider Course for the first time, it is recommended that you invite some experienced instructors to ensure that the course is organised according to the NCORT standards.
- 3.0.5 It is important to have a registry of participants and courses conducted for auditing and planning the training course in future. (Appendix 2)

3.1 Budget

It would be useful at the outset if the hospital apportions a fixed allocation for the resuscitation courses early in the year. Budget includes cost for equipment, food and stationary.

3.2 Physical Facilities/Venue

- 3.2.1 Course venue should be carefully selected. Ideally it should be air-conditioned and there should be a big room for lectures and smaller rooms or space for the various skill stations. Skill lab is preferable.
- 3.2.2 Basic audio visual aids such as overhead projector, video player and laptop are all that is required.
- 3.2.3 Example of layout as per appendix 4

3.3 Equipment (refer to Appendix 6)

3.4 Human Resources

Instructors/facilitators to participants ratio should be 1 to 6
Secretariat for time manager and technical committee

3.5 Course Materials

3.5.1 BLS instructor responsible to ensure the students receive or download the BLS training manual from MOH website (archive-policy)

3.5.2 The Course should consist of lectures/video, practical and assessment which includes MCQ and skills. The lecture also can be downloaded from the same website.

3.5.3 Duration of Course – 1 full day.

3.6 Instruction Tips

Prepare for your role as a BLS Instructor well. **Review** all course materials ie NCORT BLS Instructor Manual and BLS Training Manual and anticipate questions or challenges that may arise from students during course. The time you invest in this part of your preparation is important to the overall success of every student.

3.7 Course Preparation In Chronological Orders

3.7.1 4 to 8 weeks before the Course

3.7.1.1 Determine course specifics, such as

3.7.1.1.1 Your class participants, including their professions (in facility or prehospital providers) and how the skills taught during this course will translate to their on-the-job performance.

3.7.1.1.2 Number of participating students.

3.7.1.1.3 Any special needs or equipment needed for the course.

3.7.1.2 Reserve all needed equipment to teach the course.

3.7.1.3 Schedule a room that meet the room requirements for the BLS Course.

3.7.1.4 Schedule the instructors.

3.7.2 **At least 4 weeks before the Course**

3.7.2.1 Send participating students pre-course letters and the course agenda. (refer Appendix 2).

3.7.2.2 Send call letters to the instructors involved.

3.7.3 **1 week to a day before the Course**

3.7.3.1 Confirm room reservations and all required equipment needed area available for the course.

3.7.3.2 Set up the room and make sure all equipments are working properly. This can also be done the day of the course if the room is not accessible the day before.

3.7.3.3 Coordinate the roles and responsibilities with additional instructors, if needed, to fulfil the course agenda and to ensure efficiency and timing of the course, per the course agenda.

3.7.3.4 Ensure that all course paperwork is in order.

3.7.4 **Day of the Course**

Arrive at the course location early to complete the following:

3.7.4.1 Make sure all equipments are working and in good condition.

3.7.4.2 Distribute supplies to the students or set up supplies for students to collect when they arrive,

with clear instruction what they need.

3.7.4.3 Greet students as they arrive to put the, at ease, and direct them where to go.

3.7.4.4 Assign a time keeper and adhere to allocated time.

3.8 Conducting The Course

3.8.1 Course Introduction

3.8.1.1 Course Introduction

3.8.1.2 Instructor Tips

3.8.1.2.1 Be familiar with the learning objectives and the BLS Course content. Knowing what you want to communicate, why it's important, and what you want to happen as a result is critical to the success of the course.

3.8.1.2.2 Think about how you want to manage breaks during the course. Making yourself available allows you to answer questions people might feel too embarrassed to ask in front of everyone. It is also gives you time to establish rapport and get the feedback.

3.7.1.3 Discussion

3.7.1.3.1 Introduce yourself and additional instructors, if present.

3.7.1.3.2 Invite students to introduce themselves.

3.7.1.3.3 Explain that the course is interactive. Refer to the following points (see detailed information for each

throughout the Instructor Manual) for discussion with students:

- 3.7.1.3.3.1 Your role
- 3.7.1.3.3.2 Use of scenarios
- 3.7.1.3.3.3 Use of the Provider Manual
- 3.7.1.3.3.4 Skills tests and assessment
- 3.7.1.3.4 Ask that any student who anticipates difficulties due to personal limitations, such as a medical concern or knee or back problems.
- 3.7.1.3.5 Explain the layout of the building, including bathrooms and emergency exits.
- 3.7.1.3.6 Describe the course agenda.
- 3.7.1.3.7 Reminds students what they will learn during the course (refer course objectives).
- 3.7.1.3.8 Remind students of the course completion requirements:

Skills Test Requirements	Exam Requirements
<p>Students must successfully pass these skills tests by being evaluated once in each role:</p> <ul style="list-style-type: none"> • Adult CPR with AED Skills Test • Infant CPR Skills test 	<p>Score at least 75% on the exam</p>

3.8.2 Lecture/Video

Use the NCORT prepared lecture slide (downloadable MOH website archive-policy)

3.8.2.1 Learning Objectives

Tell students that at the end of this lesson, they will be able to

- 3.8.2.1.1 Understand relevant anatomy and physiology of cardiopulmonary system.
- 3.8.2.1.2 Describe the links in the chain of survival.
- 3.8.2.1.3 Describe understand and perform BLS.

3.8.2.2 Instructor Tips

- 3.8.2.2.1 Q&A: When providing answer, remember to focus on what you do want rather than what you don't want. Remember to always state feedback in a positive tone.
- 3.8.2.2.2 Tell students to have their BLS Training Manual accessible during the course.
- 3.8.2.2.3 Emphasize the usage of AED function in the manual defibrillator.

3.8.3 Skill Stations

3.8.3.1 Objective

- 3.8.3.1.1 Emphasize high quality CPR preferably usage of real time CPR feedback system i.e. from AED/ defibrillator or mannequin system.
- 3.8.3.1.2 Monitor

3.7.3.1.2.1 Compression quality i.e. depth and rate.

3.7.3.1.2.2 Compression fraction (if CPR feedback system available)

3.8.3.1.3 Emphasize the importance of an effective team in multi-rescuer resuscitation i.e. 2 man CPR.

3.8.3.1.4 Provide effective mask ventilation.

3.8.3.1.5 Emphasize on the correct technique for relief of foreign-body airway obstruction.

3.8.3.2 Instructor tips

3.8.3.2.1 To teach using principle of 3D

3.8.3.2.1.1 Describe- tell the students what they will learn.

3.8.3.2.1.2 Demonstrate-Show the students.

3.8.3.2.1.2 Do-Allow all students to practise-provide coaching

3.8.3.2.2 Always do summary what they learn.

3.8.3.2.3 Familiarize with simulator, defibrillator with AED function, AED and "AED trainer "used.

3.8.3.2.4 Use of checklist is essential in conducting skill stations especially for new instructors.

3.8.3.2.5 Always adopt the principles of adult learning.

3.8.3.2.6 Always adhere to time allocated for each stations.

3.8.3.2.7 Always conduct effective debriefing to participants.

3.8.4 Common errors by instructors

3.8.4.1 Give lectures during skill stations.

3.8.4.2 Poor time management.

3.8.4.3 Did not study the course material prior to the training.

3.8.4.4 Unfamiliar with the equipments and devices.

3.8.4.5 Poor control of participants.

3.8.4.6 Lack of communication with participants.

A close-up, soft-focus photograph of several hands stacked together, with a child's face visible in the background. The hands are of various skin tones and are positioned in a way that suggests support and care. The child's face is partially visible in the upper left, looking towards the camera. The overall tone is warm and nurturing.

Assessment and Remediation

4.0 Testing For Course Completion

4.1 Course Completion Requirements

To receive a course certificate, students in the BLS Course must pass both skills tests and MCQ test (at least 75%).

Students who scored less than 75% need immediate remediation.

During remediation, make sure that the students understand why their answers were incorrect.

4.2 Skills Testing

CPR skills test is to ensure that there is a uniform and objective approach for testing CPR skills.

The skills testing checklists by NCORT help instructors evaluate each student's CPR skills.

CPR competency is critical to victim survival. It is important that you use the skills testing checklists to evaluate each student's performance and to ensure consistent testing and learning across all BLS courses. Your adherence to these testing procedures will enhance the CPR competency of your students.

You must keep a copy of completed skills testing checklists for students who are unsuccessful.

4.3 Using a Stopwatch

To achieve accuracy during the skills practice and testing, a stopwatch is an alternative to measure the rate of compressions if there is no CPR feedback system. Follow these rules when using a stopwatch:

4.3.1 Start your stopwatch when the student first compresses the breastbone.

4.3.2 Stop your stopwatch at the end of the 30th compression.

Mark the step correct if the number of seconds is between 15 and 18 seconds.

4.4 Retesting Students

If time permits during skills testing, you may retest a student 1 additional time if the student did not pass. If a student does not pass a skills test after the second attempt, the remediation with different instructor should be carried out.

4.5 Remediation

Remediation is a learning process in which the instructor provides the student additional opportunities to master the required skills of the course.

4.6 Steps to Successful Remediation

If a student requires formal remediation, communicate that information in a private, sensitive, and objective debriefing as soon as possible after the testing has taken place.

4.6.1 Follow these steps to provide successful remediation:

- 4.6.1.1 Be respectful, courteous, positive, professional, and diplomatic when performing remediation.
- 4.6.1.2 Review the objectives for a particular scenario or skills station with the student.
- 4.6.1.3 Give positive feedback when desired actions are observed; ask open-ended questions when non preferred actions are observed to determine the learners thought process.
- 4.6.1.4 Use the same scenario repeatedly, if necessary, until the student accomplishes the objectives.
- 4.6.1.5 Don't assume that poor performance is associated with a lack of knowledge. There may be other factors (e.g. personal or work-related issues) that are influencing the student's performance.
- 4.6.1.6 Instructor styles of facilitating and student styles of learning may not match; therefore, a change of instructor may be necessary.

4.6.1.7 If an instructor has difficulty providing successful remediation to a student, the instructor may need to examine his or her own style of remediation.

4.7 Program Evaluation

Participants should give feedback through an evaluation form. Review the feedback, and then send the completed forms to the Training Unit.

4.8 Certification of BLS provider

All the participants will be given certificate of attendance or successful completion of the course. The validity is for 3 years. (Appendix).

Appendices

The background is a solid teal color with a pattern of overlapping, semi-transparent triangles in various shades of teal. A thick white horizontal line runs across the middle of the page, passing behind the text.

Appendix 1

GUIDELINES FOR RESUSCITATION TRAINING FOR MINISTRY OF HEALTH

Recommendation by NCORT on Education, Implementation of the Resuscitation Training in MOH Hospitals

1. Effort to implement new resuscitation guidelines are likely to be more successful if a carefully planned, multifaceted implementation strategy is being used. Education, while essential, is only one element of a comprehensive implementation strategy.
2. All courses should be evaluated to ensure that they reliably achieve the program objectives. Training should aim to ensure that learners acquire and retain the skills and knowledge that will enable them to act correctly in actual cardiac arrest.
3. Life support knowledge and skills, both basic and advanced, can deteriorate in as little as 3-6 months. Frequent assessments and, when needed, refresher training are recommended to maintain knowledge and skills.
4. Short video/computer self-instruction courses with minimal or no instructor coaching, combined with hands-on practice (practice-while-you-watch), can be considered as an effective alternative to a refresher course.
5. AED use should not be restricted to trained personnel. Allowing use of AEDs by individuals without prior formal training can be beneficial and may be lifesaving. Since even brief training improves performance (e.g. speed of use, correct pad placement), it is recommended that training in the use of AEDs be provided.
6. CPR prompt or feedback devices improve CPR skill acquisition and retention and may be considered during CPR training for healthcare professionals. These devices may be considered for clinical use as part of an overall strategy to improve the quality CPR.
7. Targeted Population - Recommendation
 - 7.1 All Healthcare Workers (HCW) in MOH Hospitals and Healthcare facilities shall be trained in Basic Life Support (BLS).
 - 7.2 All house-officers shall be encouraged to be trained in Advanced life support (ALS) during their training period.
 - 7.3 All doctors working in critical areas (e.g. acute admission wards, ED, ICU, HDW and CCU) shall be trained in ALS.
8. NCORT subcommittees shall review/adapt/produce training material that may include written self-instruction materials, video-based learning, textbook reading, pre-tests, skills scenarios and testing and written assessments as part of the respective resuscitation courses.
9. NCORT subcommittees will consider implementing a validation process to ensure the learning objectives will be achieved.

Instructional Methods Using Video/ IT based

- 9.1 Short video/computer self-instruction in basic life support may be used and considered as alternative to instructor-led courses. Any alternative instructor method in basic life support must go through a validation process to ensure the learning objectives can be achieved.

9.2 NCORT subcommittees shall review and endorse all short video and computer self instruction modules for use in MOH Hospitals.

10. Use of CPR Prompt/Feedback Devices

10.1 CPR prompt/feedback devices may be used during CPR training for MOH HCW.

10.2 CPR prompt/feedback devices may be used for clinical use as part of an overall strategy to improve the quality of CPR.

10.3 Instructors and rescuers should be made aware that a compressible support surface may cause a feedback device to overestimate depth of compression.

11. Course Duration

There are knowledge gaps on optimal timing and form of assessment to optimise learning, retention and application of resuscitation skills. The recommendation made is based on the current scenario in Ministry of Health hospitals. The economy and logistic of shorter intervals for update and training need to be look into based on local system and settings.

11.1 A minimum of one day duration of instructor-led BLS course.

11.2 Brief reassessment at 6 months may be considered by MOH Hospitals to improve skills and retention of providers.

11.3 New course formats introduced should be assessed and endorsed by NCORT committee to ensure that they achieve their objectives.

12. Ratio Between Instructor and Provider for BLS Training

12.1 We recommend an instructor to participant ration of 1:6 for BLS Provider courses, with at least one manikin and one AED for each group of 6.

13. Retaining Intervals

13.1 CoSTR states 'For CPR courses, skills assessment and, if required a skills refresher should be undertaken more often than the current commonly recommended training interval of 12-24 months'

13.2 CPR training activities currently vary among MOH Hospitals. Some are well established with frequent training programs and will be able to conduct frequent retraining. Some hospitals are just expanding their programs and have difficulty conducting even one course for all healthcare workers.

13.3 All HCW in MOH Hospitals will be reassessed or refreshed in BLS skills based on the resources available in individual training centres.

14. Assessments

14.1 All resuscitation courses in MOH Hospitals shall emphasise a practical skills assessment component.

15. Use of Check Lists during Actual CPR

15.1 Cognitive aids (e.g. checklists) can be used during resuscitation, provided that they do not delay the start of resuscitative efforts.

15.2 Cognitive aids (e.g. checklists) shall be created during actual resuscitation in MOH Hospitals.

15.3 Team Briefing and Debriefing

15.4 Briefing and debriefing can be used as part of learning activities during the course and actual resuscitation activities in MOH Hospitals.

16. Implementation Strategies - Recommendation

16.1 In efforts towards implementation of these guidelines in MOH Hospitals, we shall use a comprehensive, multifaceted approach including clinical champions, a consensus-building process, multidisciplinary involvement, written protocols, detailed process description, practical logistic support, multimodality/multi level education and rapid cycle improvement methods.

Appendix 2

Registry of the Participants

CONTOH LAPORAN LATIHAN RESUSITASI **BASIC LIFE SUPPORT** UNTUK PARAMEDIK

PTJ :
 Tempoh :
 Negeri :

Nama Hospital	Jumlah Anggota Di Hospital	Bil. Anggota Yang Mengikuti Latihan BLS Tahun Semasa	Jumlah Kumulatif Yang Mempunyai Sijil Yang Sah (Dan %)	Jumlah Pegawai Perubatan		Bil. Doktor Yang Mengikuti Latihan BLS Tahun Semasa		Jumlah Kumulatif Yang Mengikuti Latihan BLS Sah Tahun Semasa (%)			
				Pakar	Peg. Perubatan Siswazah	Pakar	Peg. Perubatan Siswazah	Pakar	Peg. Perubatan	Peg. Perubatan Siswazah	

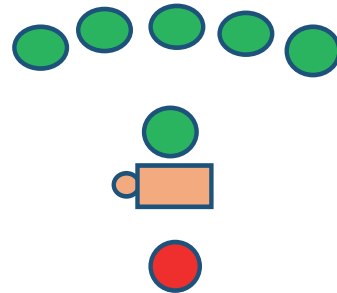
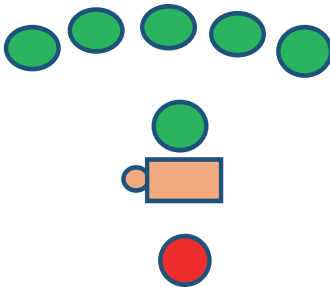
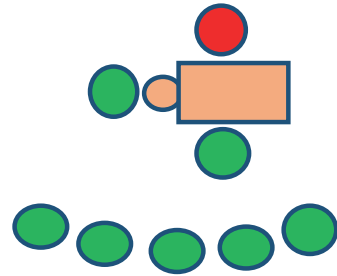
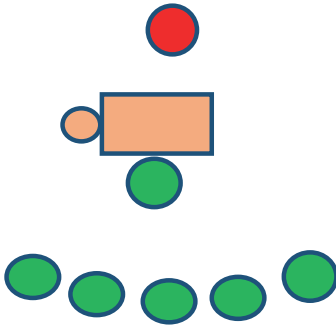
CONTOH LAPORAN LATIHAN RESUSITASI BASIC LIFE SUPPORT UNTUK PARAMEDIK


PTJ :
 Tempoh :
 Tahun :
 Negeri :

Nama Hospital	Jumlah Anggota Di Hospital	Bil. Anggota Yang Mengikuti Latihan BLS Tahun Semasa	Jumlah Kumulatif Yang Mempunyai Sijil Yang Sah (Dan %)	Jumlah Paramedik		Bil. Paramedik Yang Mengikuti Latihan BLS Tahun Semasa		Jumlah Kumulatif Yang Mengikuti Latihan BLS Sah Tahun Semasa (%)	
				Jururawat	PPP	Jururawat	PPP	Jururawat	PPP

Appendix 3

Floor Plan Layout



 Instructor Trainer

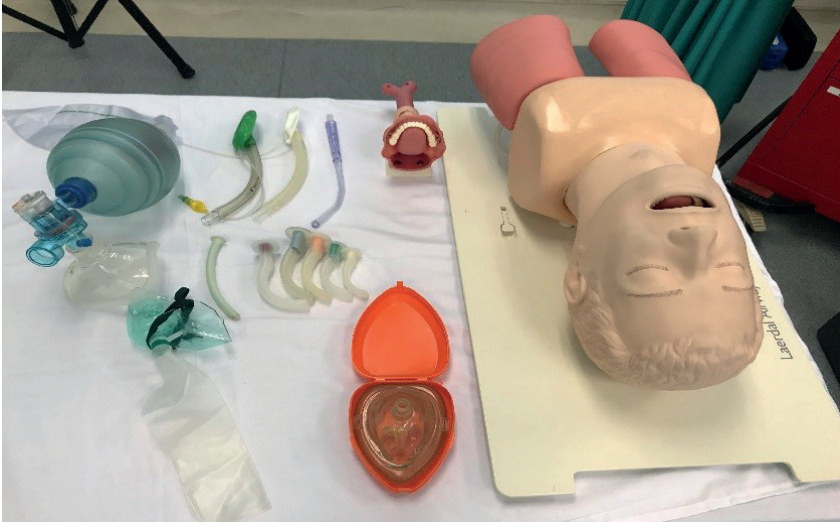
 Mannequin

 Participants

Appendix 4

Layout of Skill Stations

Example of skill stations pictures



► Airway Station



► Infant CPR with high quality CPR monitoring

Appendix 5

Equipments Needed To Conduct Skill Station



	Skill Station	Mannequin/ Equipment	Minimum Number Required
1	1 man/ 2 man CPR	Half Torso CPR Mannequin	2
2	Infant CPR	Infant CPR Mannequin	2
3	Adult Choking-Choking	Adult Choking Mannequin	1
	Adult Choking - Unconscious	Half Torso CPR Mannequin	1
4	Infant CPR / Choking	Infant CPR Mannequin	2
5	Airway	Airway Mannequin Bag And Valve Mask Device	2
6	AED	AED trainer / AED and Manual Defibrillator with AED function	2
7	Video show	TV and DVD/ Media Player	1
8	Lecture	Computer and Projector	1

Equipments Needed To Set Up A Skill Lab

Equipment	Requirement for Hospital with Specialists	Requirement for Hospital without Specialists
Adult Mannequin	6	2
Adult Choking Mannequin	3	1
Infant Mannequin	4	2
Infant Choking Mannequin	4	1
AED trainer	2	1
Bag Valve Mask	6	2

Appendix 6

EXAMPLE OF CERTIFICATE FOR BLS PROVIDER COURSE



**NATIONAL COMMITTEE ON
RESUSCITATION TRAINING
MINISTRY OF HEALTH
MALAYSIA**

This is to certify that

ALI BIN AHMAD IC : 900831035617

.....

has successfully completed/attended

**BASIC LIFE SUPPORT
PROVIDER COURSE**

On 20th August 2018

at

Hospital Kuala Lumpur

.....
Hospital Director

.....
Hospital Course Director

Appendix 7

MOH NCORT 2015 BLS HCP CHECKLIST

Station: One (1) man CPR

SKILL TEST FOR ONE (1) MAN CPR			
	SKILL PERFORMANCE	✓ IF DONE CORRECTLY	
1	DANGER		
	Wear PPE (gloves, apron, mask), look out for blood spills, sharps, electric wires, Unsteady beds, trolley		
2	RESPONSE		
	A. Shoulder Tap		
	B. Shout & Speak		
3	SHOUT FOR HELP		
	Shout 'Emergency! Emergency! Bring the resuscitation trolley and defibrillator!'		
4	AIRWAY		
	A. Head Tilt Chin Lift		
	B. Jaw Thrust		
5	BREATHING		
	Absent / abnormal breathing		
	Determined simultaneously while opening the airway by looking at the chest, neck and face for not more than 10s.		
	Chest compression shall begin with absence of normal breathing.		
	Normal breathing		
	Recovery position		
6	CIRCULATION		
	A. Location (Middle of chest, lower half of sternum)		
	B. Rate (100-120/min)		
	C. Depth (5-6 cm)		
	D. Full recoil after each compression		
	E. Minimize Interruption		
	F. 30 compressions: 2 ventilations		
	G. Each ventilation in 1 second		
7	PULSE CHECK (After 5 cycles/ 2 minutes)		
	Pulse Present, Abnormal or No Breathing (not more than 10 sec) --> ventilation 1 in 5-6 seconds		
	Pulse & Breathing Present ----> recovery position		
	Recovery Position		
TEST RESULT		Pass	Fail
COMMENTS:			
INSTRUCTOR:			

Appendix 8

MOH NCORT 2015 BLS HCP CHECKLIST

Station: Two (2) man CPR

SKILL TEST FOR TWO (2) MAN CPR			
	SKILL PERFORMANCE	✓ IF DONE CORRECTLY	
1	DANGER		
	Wear PPE (gloves, apron, mask), look out for blood spills, sharps, electric wires, Unsteady beds, trolley		
2	RESPONSE		
	A. Shoulder Tap		
	B. Shout & Speak		
3	SHOUT FOR HELP		
	Shout 'Emergency! Emergency! Bring the resuscitation trolley and defibrillator!'		
4	SECOND RESCUER IDENTIFY SELF		
5	AIRWAY		
	A. Head Tilt Chin Lift		
	B. Jaw Thrust		
5	BREATHING		
	Absent / abnormal breathing		
	Determined simultaneously while opening the airway by looking at the chest, neck and face for not more than 10s.		
	Chest compression shall begin with absence of normal breathing.		
	Normal breathing		
	Recovery position		
6	CIRCULATION		
	A. Location (Middle of chest, lower half of sternum)		
	B. Rate (100-120/min)		
	C. Depth (5-6 cm)		
	D. Full recoil after each compression		
	E. Minimize Interruption		
	F. 30 compressions: 2 ventilations		
7	PULSE CHECK (After 5 cycles/ 2 minutes)		
	Pulse & Breathing Present ----> recovery position		
	Pulse Present, Abnormal or No Breathing (not more than 10 sec) Ventilation 1 in 5-6 seconds		
	Pulse absent --> to switch rescuer		
8	CHANGING PROCESS		
	Switch rescuer after completed 5 cycles or 2 minutes.		
TEST RESULT	Pass	Instructor Potential	Fail
COMMENTS:			
INSTRUCTOR:			

Appendix 9

MOH NCORT 2015 BLS HCP CHECKLIST

Station: Infant CPR

SKILL TEST FOR INFANT CPR		✓ IF DONE CORRECTLY
SKILL PERFORMANCE		
1	DANGER (Wear PPE (gloves, apron, mask), look out for blood spills, sharps, electric wires)	
2	RESPONSE A. Shout & Speak- call baby B. Tap baby soles	
3	SHOUT FOR HELP Shout 'Emergency! Emergency! Bring the resuscitation trolley and defibrillator!'	
4	AIRWAY Head Tilt Chin Lift	
5	BREATHING Look for normal breathing should not take more than 10 seconds.	
Absent or abnormal breathing		
	Give 5 initial rescue breaths (Duration of delivering a breath is about 1 second sufficient to produce a visible chest rise)	
Normal breathing		
	Turn him on his side into the recovery position. Send or go for help. Check for continuous normal breathing.	
6	CIRCULATION Brachial Pulse Felt (not more than 10 sec) Start chest compression	
	Technique: For one rescuer CPR in an infant, the rescuer compresses with the tips of 2 fingers. For two rescuers CPR in an infant, the two thumb chest compression technique is used.	
	Site of Compression Lower half of the sternum	
	Depth of Compression: At least 1/3 the depth of the chest or 4 cm	
	Rate of Compression: Push at the rate of at least 100-120/min	
	Ratio of Compressions to Breaths: One Rescuer CPR - 15:2 Two Rescuers CPR - 15:2	
	Pulse Present/ pulse \geq 60b/min (No Breathing/inadequate breathing) Give breathing 12-20 breaths/min for 2 min	
Pulse present / pulse \geq 60 b /min and normal breathing		
	Recovery Position	
TEST RESULT	Pass	Instructor Potential
COMMENTS:		Fail
INSTRUCTOR:		

Appendix 10

MOH NCORT 2015 BLS HCP CHECKLIST

Station: Adult Choking

SKILL TEST FOR ADULT CHOKING			
SKILL PERFORMANCE			✓ IF DONE CORRECTLY
1. Ask			
	Are you choking? Are you ok?		
2 Perform			
	Apply 5 back blows		
	Apply 5 abdominal thrusts		
	Alternate 5 back blows with 5 abdominal thrusts if obstruction not relieved		
	Perform chest thrust for pregnant and very obese victims		
3 Victim unconscious			
	Put patient in supine position. Call ambulance 999		
4 Check airway for foreign body			
	Look in mouth for foreign body. Remove foreign body if seen		
5 Start 30 chest compressions			
6 Check airway for foreign body			
	Look in mouth for foreign body Remove foreign body if seen		
7 Open airway and try ventilate			
	Attempt to ventilate, if unsuccessful, reposition victim's head and re-attempt ventilation		
8 Repeat steps 5 to 7 until able to give 2 successful ventilations			
9 Proceed to look for breathing. If breathing present, place victim in the recovery position.			
10 If no breathing, proceed to CPR cycles.			
TEST RESULT			
	Pass	Instructor Potential	Fail
COMMENTS:			
INSTRUCTOR:			

Appendix 11

MOH NCORT 2015 BLS HCP CHECKLIST

Station: Infant Choking

SKILL TEST FOR INFANT CHOKING			
	SKILL PERFORMANCE	✓ IF DONE CORRECTLY	
Conscious Patient			
1	Assess level of consciousness		
	Tap the shoulder		
	Call the patient		
2	Perform back blow and chest thrust		
	Correct positioning and technique		
	A. Support the infant in a head-downwards, prone position by placing the thumb of one hand at the angle of the lower jaw.		
	B. Deliver up to 5 sharp back blows with the heel of one hand in the middle of the back between the shoulder blades.		
	C. Turn the infant into a head-downwards supine position and place free arm along the infant's back and encircling the occiput with your hand.		
	D. Identify the landmark - lower sternum approximately a finger's breadth above the xiphisternum to deliver up to 5 chest thrusts.		
Unconscious Patient			
1	Assess level of consciousness		
	Tap the shoulder		
	Call the patient		
2	Open airway		
	Open airway using a Head tilt/ chin lift		
	Check for foreign body		
	Finger Sweep If F/B Visible		
3	Perform Rescue Breath		
	Correct technique (good mouth and nose seal)		
	1 second per breath for 5 breath		
	Visible chest rise		
	Repositioning if no chest rise after a breath		
4	Circulation		
	If there is no response (moving, coughing, spontaneous breaths) proceed to chest compressions without further assessment of the circulation.		
	After 15 compressions and 2 ventilations, activate the EMS if no one has done so.		
	Continue with cycles of 15 chest compressions and 2 ventilations until the object is expelled.		
TEST RESULT	Pass	Instructor Potential	Fail
COMMENTS:			
INSTRUCTOR:			

Appendix 12

MOH NCORT 2015 BLS HCP CHECKLIST

Station: AED (Automated External Defibrillator)

SKILL TEST FOR AED (Automated External Defibrillator)			
SKILL PERFORMANCE			✓ IF DONE CORRECTLY
1	Prepares and exposed patient’s chest		
2	Switch on the AED (follow voice prompt)		
3	Positions pads appropriately		
	Select proper size of AED pads		
	Ensure pad placement in correct position <ul style="list-style-type: none"> - place one AED pad on the victim’s right upper chest (directly below clavicle) - place another AED pad to the side of the apex of the heart 		
4	Clears patient to analyze		
	Ensures that no CPR is being done while machine analyzes		
5	Clears patient to shock/presses shock button		
	Instructs all to “stand clear” and “clears” him/her self as indicated by the AED. (Must be visible and verbal check)		
6	Immediately continue CPR		
TEST RESULT			
	Pass	Instructor Potential	Fail
COMMENTS:			
INSTRUCTOR:			

References



References

- 1** Policy For Resuscitation Training In Ministry of Health Malaysian 2016
- 2** Guideline For Resuscitation Training In Ministry of Health Malaysian 2016
- 3** Basic Life Support Training Manual 2017, MOH
- 4** Advanced Life Support Instructor Manual 2016, MOH
- 5** Basic Life Support Instructor Manual American Heart Association 2016
- 6** International Liaison Committee on Resuscitation (ILCOR) 2015 Guidelines
- 7** European Resuscitation Council (ERC) Guidelines for Resuscitation

Technical Committee

Technical Committee

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