

Sri Lakshmi Narayana Institute of Medical sciences

Date-21-11-21

From

Dr. K. Ravindranath Reddy
Professor and Head,
Department of dermatology
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

To The Dean Sri Lakshmi Narayana Institute of Medical Sciences Bharath Institute of Higher Education and Research, Chennai.

Sub: Permission to conduct value-added course: Common bacterial skin infections

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: **Common bacterial skin infections** on 12-12-2021. We solicit your kind permission for the same.

Kind Regards

Dr. K. Ravindranath Reddy

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: Dr. Jayalakshmi

The HOD: Dr. K. Ravindranath Reddy

The Expert: Dr. A. Buvanaratchagan

The committee has discussed about the course and is approved.

Dr. G. JAYALAKSHMI, BSC., MBBS., DTCD., M.D., DeanDEAN

Sri Lakshmi Narayana Institute of Medical Sciences Osudu, Agaram, Kudapakkam Post, Villianur Commune, Puducherry 605502. Subject Expert

HOD



Sri Lakshmi Narayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST, PUDUCHERRY - 605 502.

[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]

[Affliated to Bharath University, Chennai - TN]

Circular

28.10.2021

Sub: Organising Value-added Course: common bacterial skin infections

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, **Bharath Institute of Higher Education and Research** is organizing "common bacterial skin infections". The course content is enclosed below."

The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before 30-10-2021. Applications received after the mentioned date shall not be entertained under any circumstances.

Dr. G. JAYALAKSHMI, BSC., MBBS., DTCD., M.D.

Sri Lakshmi Narayana Institute of Medical Sciences Osudu, Agaram, Kudapakkam Post, Villianur Commune, Puducherry - 605502.

Encl: Copy of Course content

COURSE PROPOSAL

Course Title: Common bacterial skin infections

Course Objective: To review in detail about the common bacterial skin infections to second

year mbbs students

Course Outcome: completed

Course Audience: second year mbbs students Course Coordinator: Dr. K. Harsha Vardhan

Course Faculties with Qualification and Designation:

1. Dr. K. Harsha Vardhan

Professor, Department of Dermatology

2. Dr. Buvanaratchagan

Professor, Department of dermatology

Course Curriculum/Topics with schedule (Min of 30 hours)

SlNo	Date	Topic	Time	Hours	Lecture taken by
1	12-12-21	Common bacterial skin infections definitions	4 to 6 pm	2 hours	Dr. K. Harsha Vardhan
2	15-12-21	Impetigo	5 to 7 pm	2 hours	Dr. Buvanaratchagan
3	19-12-21	Ecthyma	4:30 to 6:30pm	2 hours	Dr. K. Harsha Vardhan
4	23-12-21	Cellulitis	4 to 6 pm	2 hours	Dr. Buvanaratchagan
5	26-12-21	Erysipelas	5 to 7 pm	2 hours	Dr. K. Harsha Vardhan
6	30-12-16	Folliculitis	4 to 6 pm	2 hours	Dr. Buvanaratchagan
7	2-1-22	Furuncle and carbuncle	4:30 to 6:30pm	2 hours	Dr. K. Harsha Vardhan
8	6-1-22	How to differentiate between bullous and non bullous impetigo	5 to 7 pm	2 hours	Dr. Buvanaratchagan
9	9-1-22	Complications	4:30 to 6:30pm	2 hours	Dr. K. Harsha Vardhan
10	13-1-22	How to differentiate between cellulitis and erysipelas	4 to 6 pm	2 hours	Dr. Buvanaratchagan
11	17-1-22	General measures in management	5 to 7 pm	2 hours	Dr. K. Harsha Vardhan
12	20-1-22	Investigations	4:30 to 6:30pm	2 hours	Dr. Buvanaratchagan
13	23-1-22	Treatment	4 to 6 pm	2 hours	Dr. K. Harsha Vardhan
14	26-1-22	Daily care in eczematous skin	5 to 7 pm	2 hours	Dr. Buvanaratchagan
15	27-1-22	How to prevent recurrence	4:30 to 6:30pm	2 hours	Dr. K. Harsha Vardhan
			Total Hours	30	

REFERENCE BOOKS:

- 1. Rooks Textbook of dermatology 9th edition
- 2. Fitzpatrick's dermatology in medicine 8th edition

ABSTRACT -VALUE ADDED COURSE

1. Name of the programme & Code

Common bacterial skin infections and DR03

2. Duration & Period

30 hrs & 2021–2022

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Multiple choice questions- Enclosed as Annexure- III

6. Course Feed Back

Enclosed as Annexure- IV

7. No. of times offered during the same year:

2021-2022

8. Year of discontinuation: 2022

9. Summary report of each program year-wise

	Value Added Cor	urse- 2021– 2022		
Course Code	Course Name	Resource Persons	Target Students	Strength & Year
DR03	Common bacterial skin infections	Dr. Bhuvanaratchagan	2nd yr MBBS	15 2021– 2022
	0.0000000000000000000000000000000000000	Course Code Course Name Common bacterial skin	Common Dr. DR03 bacterial skin Bhuvanaratchagan	Course Code Course Name Resource Persons Target Students DR03 Common bacterial skin Dr. Bhuvanaratchagan 2nd yr MBBS

10. Certificate model

Enclosed as Annexure- V

Dr. Buvanaratchagan

Dr. K. Harsha Vardhan

RESOURCE PERSON

COORDINATOR

COMMON BACTERIAL SKIN INFECTIONS



PARTICIPANT HAND BOOK

COURSE DETAILS

Particulars	Description
Course Title	Common bacterial skin infections
Course Code	DR03
Course Code	DRUS
Objective	To learn about the various skin infections
	2. To learn how to make the diagnosis
	3. To learn the causative organisms
	4. To learn about the management
Further learning	Culture characteristics and drug resistant organisms
opportunities	
Key Competencies	To make a diagnosis and provide adequate treatment
	To prevent complications
Target Student	2 nd yr MBBS Students
Duration	30hrs: nov 2021 to feb 2022
Theory Session	10hrs
Practical Session	20hrs
Assessment	Multiple choice questions
Procedure	

Cellulitis

Cellulitis is a painful, erythematous infection of the dermis and subcutaneous tissues that is characterized by warmth, edema, and advancing borders. Cellulitis commonly occurs near breaks in the skin, such as surgical wounds, trauma, tinea infections, or ulcerations, but occasionally presents in skin that appears normal. Patients may have a fever and an elevated white blood cell

count. Cellulitis can occur on any part of the body. Among the patients in the cohort above, the most common sites of cellulitis were the legs and digits, followed by the face, feet, hands, torso, neck, and buttocks

Descriptions of Bacterial Skin Infections

DISEASE	DESCRIPTION
Carbuncle	A network of furuncles connected by sinus tracts
Cellulitis	Painful, erythematous infection of deep skin with poorly demarcated borders
Erysipelas	Fiery red, painful infection of superficial skin with sharply demarcated borders
Folliculitis	Papular or pustular inflammation of hair follicles
Furuncle	Painful, firm or fluctuant abscess originating from a hair follicle
Impetigo	Large vessicles and/or honey-crusted sores



Cellulitis secondary to tinea infection.

In otherwise healthy adults, isolation of an etiologic agent is difficult and unrewarding. If the patient has diabetes, an immunocompromising disease, or persistent inflammation, blood cultures or aspiration (some physicians inject sterile nonpreserved saline before aspiration) of the area of maximal inflammation may be useful. For infection in patients without diabetes, empiric

treatment with a penicillinase-resistant penicillin, first-generation cephalosporin, amoxicillinclavulanate (Augmentin), macrolide, or fluoroquinolone (adults only) is appropriate. Limited disease can be treated orally, but more extensive disease requires parenteral therapy. Marking the margins of erythema with ink is helpful in following the progression or regression of cellulitis. Outpatient therapy with injected ceftriaxone (Rocephin) provides 24 hours of parenteral coverage and may be an option for some patients. The patient should be seen the following day to reassess disease progression.



Inked margins of cellulitis.

Most cases of superficial cellulitis improve within one day, but patients who exhibit thickening of the dermis usually take several days of parenteral antibiotics before significant improvement occurs. Antibiotics should be maintained for at least three days after the resolution of acute inflammation. Adjunctive therapy includes the following: cool compresses; appropriate analgesics for pain; tetanus immunization; and immobilization and elevation of the affected extremity.

A parenteral second- or third-generation cephalosporin (with or without an aminoglycoside) should be considered in patients who have diabetes, immunocompromised patients, those with unresponsive infections, or in young children. The patient may also require a plain radiograph of the area or surgical debridement to evaluate for gas gangrene, osteomyelitis, or necrotizing fasciitis. Recurrent episodes of cellulitis or undergoing surgery, such as mastectomy with lymph node dissection, can compromise venous or lymphatic circulation and cause dermal fibrosis,

lymphedema, epidermal thickening, and repeated episodes of cellulitis. These patients may benefit from prophylaxis with erythromycin, penicillin, or clindamycin (Cleocin).

Periorbital cellulitis is caused by the same organisms that cause other forms of cellulitis and is treated with warm soaks, oral antibiotics, and close follow-up. Children with periorbital or orbital cellulitis often have underlying sinusitis. If the child is febrile and appears toxic, blood cultures should be performed and lumbar puncture considered. *Haemophilus influenzae* type b (Hib) in young children was a significant concern until the widespread use of the Hib vaccine and coverage with a parenteral third-generation cephalosporin was used routinely. Recently, some researchers have recommended no longer routinely covering for *H. influenzae*.

Orbital cellulitis occurs when the infection passes the orbital septum and is manifested by proptosis, orbital pain, restricted eye movement, visual disturbances, and concomitant sinusitis. Complications include abscess formation, persistent blindness, limited eye movement, diplopia, and, rarely, meningitis. This ocular emergency requires intravenous antibiotics, otorhinolaryngology, and ophthalmologic consultation.

Perianal cellulitis is caused by group A beta-hemolytic streptococcal infection and occurs most often in children. A study of children with perianal cellulitis found a mean age of onset of 4.25 years. Ninety percent of patients presented with dermatitis, 78 percent with itching, 52 percent with rectal pain, and 35 percent with blood-streaked stools. Despite 10 days of oral antibiotics (primarily penicillin or erythromycin), the recurrence rate was high at 39 percent. If there is recurrence, the presence of an abscess should be considered, with needle aspiration of the site for bacteriology being more accurate than a skin swab.

Erysipelas

Erysipelas, also known as St. Anthony's fire, usually presents as an intensely erythematous infection with clearly demarcated raised margins, and often with associated lymphatic streaking. Common sites are the legs and face. Most cases do not have an inciting wound or skin lesion and are preceded by influenza-like symptoms. The incidence of erysipelas is rising, especially in young children, the elderly, persons with diabetes, alcoholic persons, and patients with compromised immune systems or lymphedema.



FIGURE 3. Erysipelas.

Erysipelas is caused almost exclusively by beta-hemolytic streptococcus and thus can be treated with standard dosages of oral or intravenous penicillin. However, most physicians treat this infection the same as cellulitis, which is outlined earlier. Adjunctive treatment and complications are the same as for cellulitis.

Impetigo

Impetigo is most commonly seen in children aged two to five years and is classified as bullous or nonbullous. The nonbullous type predominates and presents with an erosion (sore), cluster of erosions, or small vesicles or pustules that have an adherent or oozing honey-yellow crust. The predilection for the very young can be remembered by the common lay misnomer, "infant tigo." Impetigo usually appears in areas where there is a break in the skin, such as a wound, herpes simplex infection, or maceration associated with angular cheilitis (), but *Staphylococcus aureus* can directly invade the skin and cause a de novo infection.



FIGURE 4.Nonbullous impetigo.

The bullous form of impetigo presents as a large thin-walled bulla (2 to 5 cm) containing serous yellow fluid. It often ruptures leaving a complete or partially denuded area with a ring or arc of remaining bulla. More than one area may be involved and a mix of bullous and nonbullous findings can exist. Nonbullous impetigo was previously thought to be a group A streptococcal process and bullous impetigo was primarily thought to be caused by *S. aureus*. Studies now indicate that both forms of impetigo are primarily caused by *S. aureus* with Streptococcus usually being involved in the nonbullous form. If the infection is a toxin-producing, phage group II, type 71 Staphylococcus (the same toxin seen in Staphylococcus scalded skin syndrome, a medical emergency where large sheets of the upper epidermis slough off), large bullae will form

as the toxin produces intradermal cleavage. Otherwise, smaller bullae develop and the honey-crusted lesions predominate.



FIGURE 5. Ruptured bullous impetigo.

A study published in 1990 concluded that topical mupirocin (Bactroban) ointment is as effective as oral erythromycin in treating impetigo. However, because the lesions of bullous impetigo can be large and both forms of impetigo can have satellite lesions, an oral antibiotic with activity against *S. aureus* and group A beta-hemolytic streptococcal infection is warranted in nonlocalized cases. Because of developing resistance, erythromycin is no longer the drug of choice. Azithromycin (Zithromax) for five days and cephalexin (Keflex) for 10 days have been shown to be effective and well-tolerated. Dicloxacillin (Pathocil), oxacillin (Prostaphlin), first-generation cephalosporins, or amoxicillin-clavulanate are also acceptable alternatives. Broadspectrum fluoroquinolones have also been shown to be effective, and several have been approved by the U.S. Food and Drug Administration for treating skin and soft tissue infections. These medications have excellent skin penetration and good bioavailability, but no generic forms are currently available, and they are only approved for use in adults.

As with other diseases involving Streptococci, there is a small chance of developing glomerulonephritis, especially in children aged two to six years. Presenting signs and symptoms of glomerulonephritis include edema and hypertension; about one third of patients have smoky

or tea-colored urine. Streptococcal glomerulonephritis usually resolves spontaneously although acute symptoms and problems may occur.

Impetigo can be spread by direct person-to-person contact, so appropriate hygiene is warranted. Nasal carriage of *S. aureus* has been implicated as a source of recurrent disease and can be reduced by the topical application of mupirocin twice daily for five days.

Folliculitis

Hair follicles can become inflamed by physical injury, chemical irritation, or infection that leads to folliculitis. Classification is by the depth of involvement of the hair follicle. The most common form is superficial folliculitis that manifests as a tender or painless pustule that heals without scarring. The hair shaft will frequently be seen in the center of the pustule. Multiple or single lesions can appear on any skin bearing hair including the head, neck, trunk, buttocks, and extremities. Associated systemic symptoms or fever rarely exist. *S. aureus* is the most likely pathogen; however, commensal organisms such as yeast and fungi occasionally appear, especially in immunocompromised patients. These lesions typically resolve spontaneously. Topical therapy with erythromycin, clindamycin, mupirocin, or benzoyl peroxide can be administered to accelerate the healing process.

Staphylococci will occasionally invade the deeper portion of the follicle, causing swelling and erythema with or without a pustule at the skin surface. These lesions are painful and may scar. This inflammation of the entire follicle or the deeper portion of the hair follicle (isthmus and below) is called deep folliculitis. Oral antibiotics are usually used in the treatment and include first-generation cephalosporins, penicillinase-resistant penicillins, macrolides, and fluoroquinolones.

Gram-negative folliculitis usually involves the face and affects patients with a history of long-term antibiotic therapy for acne. Pathogens include Klebsiella, Enterobacter, and Proteus species. It can be treated as severe acne with isotretinoin (Accutane), but use of isotretinoin is associated with major side effects, including birth defects.

"Hot tub" folliculitis is caused by *Pseudomonas aeruginosa* contamination of under-treated water in a hot tub or whirlpool. Multiple pustular or papular perifollicular lesions appear on the trunk and sometimes extremities within six to 72 hours after exposure and mild fever and

malaise may occur. Lesions in the immunocompetent patient typically resolve spontaneously within a period of seven to 10 days. Treatment is directed at prevention by appropriately cleaning the whirlpool or hot tub and maintaining appropriate chlorine levels (bromine and copper solutions are less common alternatives) in the water.



FIGURE 6. Folliculitis caused by contamination of undertreated water in a hot tub or whirlpool.

Furuncles and Carbuncles

Furuncles and carbuncles occur as a follicular infection progresses deeper and extends out from the follicle. Commonly known as an abscess or boil, a furuncle is a tender, erythematous, firm or fluctuant mass of walled-off purulent material, arising from the hair follicle. These lesions may occur anywhere on the body, but have a predilection for areas exposed to friction. Furuncles rarely appear before puberty. The pathogen is usually *S. aureus*. Typically, the furuncle will develop into a fluctuant mass and eventually open to the skin surface, allowing the purulent contents to drain, either spontaneously or following incision of the furuncle.

Carbuncles are an aggregate of infected hair follicles that form broad, swollen, erythematous, deep, and painful masses that usually open and drain through multiple tracts. Constitutional symptoms, including fever and malaise, are commonly associated with these lesions but are rarely found with furuncles. With both of these lesions, gentle incision and drainage is indicated when lesions "point" (fluctuant or boggy with a thin shiny appearance of the overlying skin); caution should be taken to not incise deeper than the pseudo capsule that has been built at the site of infection. Loculations should be broken with a hemostat. The wound may be packed (usually with iodoform gauze) to encourage further drainage. In severe cases, parenteral antibiotics such as cloxacillin (Tegopen), or a first-generation cephalosporin such as cefazolin (Ancef), are required. The physician should be aware of the potential for gas-containing abscesses or necrotizing fasciitis, which require immediate surgical debridement.

Annexure 2

Bharath Institute of Higher Education and Research

Sri Lakshmi Narayana Institute of Medical Sciences

Participant list of Value-added course: COMMON BACTERIAL SKIN INFECTIONS-DR03 (Nov 2021 - Feb- 2022)

	2nd Year MBBS Stud	lent	
SI. No	Name of the Student	Reg No	Signature
1	SUMATHI.B	U15MB381	Surs
2	SURESHKRISHNAN.R	U15MB382	Sel.
3	SURIYA.S	U15MB383	Giris
4	SUSHMITHA.K	U15MB384	se.
5	SUWATHI.R	U15MB385	Guesta
6	SUJI RAKSHANAA.K	U15MB380	Cuys.
7	SYLVIA MARY. S	U15MB386	cylis
8	THAJES KENCY.F	U15MB387	D.
9	THIRUNAVUKARASU .S	U15MB388	there
10	UTHISH. R	U15MB389	0
11	VELMURUGAN	U15MB390	VOLT
12	VENKATAKUMAR R	U15MB391	Verte
13	VENKATESH G	U15MB392	W.
14	VIDYABARATI T	U15MB393	huf.
15	VIGNESH V	U15MB394	Musey.

Dr. Buvanaratchagan

RESOURCE PERSON

Asso, Professor, Dermatchogy Sri Lakshmi Narayana Institute of Medical Sciences Osudu, Kudabakkam, Puducherry-805 502

Dr. K. Harsha Vardhan

COORDINATOR

PROFESSOR & HEAD DEPT. OF DERMATOLOGY



SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

Annexure - III

COMMON BACTERIAL SKIN INFECTIONS

MULTIPLE CHOICE QUESTIONS

Course code: DR03

ANSWER	ALL	THE	QUEST	LIUNIS
ANSVER	ALL	ILLE	QUES	LIONS

- 1._____ presents as a well-defined, spreading erythematous involving the blocking of dermal lymphatics.
 - A. Folliculitis
 - o B.Gangrene
 - o C.Erysipelas
 - o D.Impetigo

. 2

What is the most common cause of skin infections?

- o A. Streptococcus pyogenes
- o B. Staphylococcus aureus
- o C. Group B hemolytic Strep
- o D. MRSA

3.

What histological finding in folliculitis is responsible for enclosing the site of infection, only allowing for the local spread of infection?

- o A. Outward drainage
- B. Inward drainage
- C. Fibrin deposits
- o D. Purulent formation

• 4.

Gram negative bacteria produce the enzyme beta-lactamase that act by what mechanism?

- A. Inactivate membrane receptors
- o B. Hydrolyze lactam rings thus inactivating penicillin
- o C. Phosphorylate backbone of penicillin rendering it ineffective
- o D. Hydrolyze lactam rings making them susceptible to penicillin degradation

5.

MRSA can be treated with

- o A. Penicillin
- o B. Methicillin
- o C. Vancomycin
- o D. Cephalosporin

• 6.

Another name for Staphylococcal scalded syndrome is

- A. Elsberg syndrome
- o B. Gangrene
- o C. Ritter's disease
- o D. TSS

7.

Strep. pyogenes secretes toxic products, such as pyrogenic endotoxins (SPEA, B, C) with acts on skin blood vessels to cause the diffuse erythematous rash seen in what clinical condition?

- o A. Mumps
- o B. Rubella

- C. Scarlet fever
- D. Measles

• 8.

This infection with Strep. pyogenes involves the dermal lymphatics and presents clinically with a "butterfly-wing" rash

- o A. Folliculitis
- o B. Impetigo
- o C. Erysipelas
- o D. Cellulitis

9.

This is an example of an acute spreading infection of the skin that involves the subcutaneous, fat tissue

- o A. Folliculitis
- o B. Erysipelas
- o C. Cellulitis
- o D. Gangrene

10.

Synergistic bacterial gangrene is typically caused by what type of Strepococci and Staph. aureus?

- A. Obligate aerobic
- o B. Microaerophilic
- o C. Facultative anaerobic
- o D. Aerotolerant



SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

Annexure - III

COMMON BACTERIAL SKIN INFECTIONS

MULTIPLE CHOICE QUESTIONS

Course code: DR03

SUMATHI.B.

ANSWER ALL THE QUESTIONS

VarolhankH 27/01/2022

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SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

Annexure - III

COMMON BACTERIAL SKIN INFECTIONS

MULTIPLE CHOICE QUESTIONS

Course code: DR03

SYLVIAMARY.S

ANSWER ALL THE QUESTIONS

To Vandhank H. 27/01/2022

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MRSA can be treated with
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مد	C	Scarlet feve
0		Measles
0	D.	Measles

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Student Feedback Form

	of Student:	our clas	sses and	l deliver	the be	
/aluat	ions, comments and suggestions will help	o us to in	nprove o	our perf	ormance	•
l. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear					
2	Course contents met with your expectations					
3	Lecturer sequence was well planned					
4	Lectures were clear and easy to understand				60	
5	Teaching aids were effective					
6	Instructors encourage interaction and were helpful					
7	The level of the course					
8	Overall rating of the course	1	2	3	4	5
Rating:	5 – Outstanding; 4 - Excellent; 3 – Good; 2– :	Satisfacto	ry; 1-N	ot-Satisfa	ctory	

Date:27-01-2022

Student Feedback Form

	Particulars	1	2	3	4	5	
NO 1	Objective of the course is clear		1				
2	Course contents met with your expectations		V				
3	Lecturer sequence was well planned						
4	Lectures were clear and easy to understand		V				
5	Teaching aids were effective						
6	Instructors encourage interaction and were helpful		V				
,	The level of the course				2		
	Overall rating of the course	1	2	3	4	5	
gesti	ons if any:						

Student Feedback Form

Course Name: COMMON BACTERIAL SKIN INFECTIONS

NO	Particulars	1	2	3	4	5
1	Objective of the course is clear		1			
2	Course contents met with your expectations			V		
3	Lecturer sequence was well planned					
1	Lectures were clear and easy to understand					
,	Teaching aids were effective					
	Instructors encourage interaction and were helpful					
	The level of the course					
	Overall rating of the course	1	2	3	4	5
ing: 5	5 – Outstanding; 4 - Excellent; 3 – Good; 2–5	Satisfacto	y, 1-140			



Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research (Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that <u>SYLVIA MARYS</u> has actively participated in the Value Added Course on Common bacterial skin infections held during Nov 2021 – Feb 2022 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. A. BUVANARATCH GAN, MD.,
Dr. Buvanara behagan
Asso nara behagan
Sri RESQURCE PERSON

PROFESSOR & HEAD
DEPT. OF DERMATOLOGY
ON LAKSHMI HARAYANA INSTITUTE
OF LAKSHMI HARAYANA INSTITUT

Dr. K. Harsha Vardhan COORDINATOR



Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research (Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that <u>Sumath B</u> has actively participated in the Value Added Course on Common bacterial skin infections held during Nov 2021 – Feb 2022 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. Buvanaratchagan

RESOURCE PERSON

Dr. K. Harsha Vardhan

Course completion letter

Date 31-01-22

From

Dr. K. Harsha Vardhan Department of Dermatology Sri Lakshmi Narayana Institute of Medical Sciences Bharath Institute of Higher Education and Research, Chennai.

Through Proper Channel

To

The Dean
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,

Chennai.

Sub: Completion of value-added course: common bacterial skin infections

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: **common bacterial skin infections** on 12-12-21.We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards

Dr. K. Harsha Vardhan

<HOD Sign and Seal>

Encl: Certificates

Photographs

