

PUBLISHED BY ALLIANCE FOR THE PRUDENT USE OF ANTIBIOTICS (APUA)-NEPAL

Editorial...

This is the fifteenth newsletter that APUA-Nepal presents you with. We hope that this newsletter will help us all in its small way, to not lose our focus from ever increasing problem of bacterial resistance.

APUA-Nepal intends to bring out its newsletter regularly to update our valued members about its activities, recent scenario and advancement in the field of antimicrobial resistance. We will indeed be grateful if you could contribute in any way possible by your suggestions, advice and comments.

We also like to request anyone working in the field of health profession to join us, to become member of APUA-Nepal.

We like to thank everyone who was involved in bringing out this newsletter.

Lastly, we intend to present this newsletter to our readers as a Dashain greetings. So, please accept our Dashain and Tihar greetings.

COMPARATIVE STUDY OF SENSITIVITY PATTERNS OF COMMON ISOLATES IN TRIBHUVAN UNIVERSITY TEACHING HOSPITAL (TUTH)

APUA- Nepal published antibiotic sensitivity patterns of common isolates in urine, blood and pus samples from different hospitals (regional, zonal and medical college teaching hospital) of Nepal in its Newsletter published from 2004 to 2017. The average sensitivity percentage from TUTH is compared with average sensitivity percentage from the same hospital, published in vol 13, 2016. The average sensitivity percentage in isolates from May to July 2018 from the hospital are calculated and included in this report. The results show differences in sensitivity patterns of isolates and use of antibiotic discs for sensitivity testing.

Source: Mr. Hari Prasad Kattel, Dr. Shovita Shrestha, Ms. Sujina Maharjan and Mr. Kamal Shrestha, Department of Microbiology, TUTH, Kathmandu.

Urine Isolates

Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 543)	% isolates sensitive May - July 2018 (n= 531)
<i>E. coli</i>		
Amikacin	89.0	92.0
Ampicillin	22.0	26.0
Ampicillin + sulbactam	68.0	80.0
Amoxicillin + clavulanic	42.0	37.0
Cefepime	82.0	76.0
Cefixime	48.0	43.0
Cefotaxime	48.0	DNU
Cefoperazone + sulbactam	87.0	85.0
Ceftazidime	82.0	96.0
Ceftriaxone	48.0	43.0
Ciprofloxacin	55.0	46.0
Chloramphenicol	93.0	93.0
Colistin	100.0	100.0
Cotrimoxazole	46.0	45.0
Doxycycline	90.0	81.0
Gentamicin	72.0	85.0
Imipenem	92.0	93.0
Levofloxacin	64.0	73.0
Meropenem	93.0	94.0
Nitrofurantoin	81.0	80.0
Norfloxacin	57.0	41.0
Ofloxacin	DNU	DNU
Piperacillin	DNU	DNU
Piperacillin + tazobactam	88.0	85.0
Tigecycline	100.0	92.0

DNU= Disc not used

ACTIVITIES BY APUA-NEPAL IN LAST ONE YEAR

- Publication and distribution of Vol. 14 of APUA-Nepal Newsletter to different medical colleges and hospitals.
- In March 2017, a meeting on Expert Consultation on Health Workforce Education and AMR Control, organized by WHO in Geneva was participated by President of APUA-Nepal.
- APUA-Nepal participated three meetings of Steering Committee for prevention and control of antimicrobial resistance to discuss AMR Action Plan Nepal held by Ministry of Health and Population (MoHP). APUA-Nepal is a member of National Alliance and a Steering Committee for prevention and control of antimicrobial resistance, constituted by MoHP.

COMPARATIVE STUDY.....

Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 78)	% isolates sensitive May - July 2018 (n = 80)	Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 18)	% isolates sensitive May - July 2018 (n=33)
<i>K. pneumoniae</i>			<i>S. aureus</i>		
Amikacin	66.0	73.0	Amikacin	100.0	100.0
Ampicillin + sulbactam	26.0	41.0	Ampicillin	39.0	57.0
Cefepime	50.0	61.0	Cephalexin	88.0	71.0
Cefixime	31.0	43.0	Ciprofloxacin	77.0	65.0
Cefotaxime	31.0	DNU	Clindamycin	100.0	80.0
Ceftazidime	46.0	44.0	Cloxacillin	88.0	72.0
Ceftriaxone	31.0	43.0	Cotrimoxazole	75.0	79.0
Cefoperazone + sulbactam	62.0	79.0	Doxycycline	100.0	100.0
Ciprofloxacin	39.0	56.0	Gentamicin	100.0	89.0
Chloramphenicol	84.0	76.0	Imipenem	88.0	DNU
Colistin	100.0	100.0	Levofloxacin	85.0	75.0
Cotrimoxazole	47.0	47.0	Meropenem	88.0	DNU
Doxycycline	78.0	73.0	Nitrofurantoin	100.0	93.0
Gentamicin	41.0	64.0	Norfloxacin	81.0	67.0
Imipenem	88.0	85.0	Teicoplanin	100.0	100.0
Levofloxacin	40.0	57.0	Tigecycline	100.0	100.0
Meropenem	83.0	82.0	Vancomycin	100.0	100.0
Nitrofurantoin	27.0	35.0	Pus Isolates		
Norfloxacin	47.0	47.0	Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 119)	% isolates sensitive May - July 2018 (n=152)
Piperacillin + tazobactam	59.0	69.0	<i>E. coli</i>		
Tigecycline	100.0	100.0	Amikacin	73.0	76.0
<i>E. faecalis</i>			Ampicillin	9.0	12.0
Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 74)	% isolates sensitive May - July 2018 (n=69)	Ampicillin + sulbactam	26.0	28.0
Amikacin	84.0	DNU	Amoxicillin + clavulanic	22.0	15.0
Ampicillin	61.0	43.0	Cefepime	56.0	45.0
Ampicillin + sulbactam	94.0	56.0	Cefixime	26.0	24.0
Amoxicillin + clavulanic	75.0	56.0	Cefotaxime	26.0	DNU
Ciprofloxacin	39.0	25.0	Ceftazidime	44.0	33.0
Doxycycline	100.0	85.0	Ceftriaxone	26.0	24.0
Gentamicin	56.0	51.0	Cefoperazone + sulbactam	66.0	66.0
Levofloxacin	53.0	34.0	Chloramphenicol	84.0	71.0
Nitrofurantoin	91.0	66.0	Ciprofloxacin	40.0	38.0
Norfloxacin	51.0	25.0	Colistin	100.0	100.0
Piperacillin + tazobactam	DNU	84.0	Cotrimoxazole	40.0	41.0
Tigecycline	100.0	100.0	Doxycycline	63.0	49.0
Teicoplanin	99.0	100.0	Gentamicin	64.0	68.0
Vancomycin	99.0	100.0	Imipenem	86.0	88.0
			Levofloxacin	50.0	45.0
			Meropenem	86.0	87.0
			Polymixin B	DNU	100.0
			Piperacillin + tazobactam	58.0	59.0
			Tigecycline	100.0	100.0

Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 61)	% isolates sensitive May - July 2018 (n= 84)	Blood Isolates		
<i>K. pneumoniae</i>			Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 39)	% isolates sensitive May - July 2018 (n= 26)
Amikacin	72.0	58.0	<i>S. aureus</i>		
Amoxicillin + clavulanic	DNU	8.0	Amikacin	93.0	86.0
Ampicillin + Sulbactam	DNU	26.0	Ampicillin	25.0	35.0
Cefepime	38.0	58.0	Cephalexin	68.0	71.0
Cefixime	24.0	30.0	Ciprofloxacin	85.0	58.0
Cefotaxime	24.0	DNU	Chloramphenicol	89.0	89.0
Ceftazidime	30.0	39.0	Clindamycin	60.0	63.0
Ceftriaxone	24.0	30.0	Cloxacillin	67.0	75.0
Cefoperazone + sulbactam	61.0	75.0	Cotrimoxazole	51.0	62.0
Ciprofloxacin	43.0	44.0	Doxycycline	100.0	DNU
Chloramphenicol	62.0	66.0	Erythromycin	36.0	32.0
Colistin	100.0	100.0	Gentamycin	76.0	72.0
Cotrimoxazole	28.0	36.0	Levofloxacin	88.0	78.0
Doxycycline	53.0	64.0	Ofloxacin	88.0	63.0
Gentamicin	48.0	51.0	Teicoplanin	100.0	100.0
Imipenem	75.0	87.0	Tigecycline	100.0	83.0
Levofloxacin	56.0	58.0	Vancomycin	100.0	100.0
Meropenem	75.0	86.0			
Polymixin B	DNU	100.0	Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 29)	% isolates sensitive May - July 2018 (n= 76)
Piperacillin + tazobactam	59.0	71.0	<i>S. enterica typhi</i>		
Tigecycline	100.0	100.0	Ampicillin	100.0	96.0
Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 193)	% isolates sensitive May - July 2018 (n= 176)	Amoxicillin + clavulanic	DNU	97.0
<i>S. aureus</i>			Azithromycin	66.0	79.0
Amikacin	91.0	97.0	Cefixime	100.0	98.0
Ampicillin	10.0	8.8	Ceftriaxone	100.0	98.0
Cephalexin	66.0	63.0	Chloramphenicol	100.0	DNU
Ciprofloxacin	43.0	63.0	Ciprofloxacin	41.0	28.0
Clindamycin	85.0	36.0	Cotrimoxazole	100.0	100.0
Chloramphenicol	94.0	56.0	Levofloxacin	66.0	49.0
Cloxacillin	72.0	92.0	Ofloxacin	DNU	60.0
Cotrimoxazole	48.0	69.0			
Doxycycline	98.0	58.0	Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 15)	% isolates sensitive May - July 2018 (n= 7)
Erythromycin	98.0	92.0	<i>S. paratyphi A</i>		
Gentamicin	43.0	92.0	Ampicillin	86.0	100.0
Imipenem	73.0	39.0	Amoxicillin + clavulanic	DNU	100.0
Levofloxacin	72.0	83.0	Azithromycin	50.0	80.0
Meropenem	78.0	DNU	Cefixime	100.0	100.0
Teicoplanin	72.0	93.0	Ceftriaxone	100.0	100.0
Tigecycline	100.0	69.0	Chloramphenicol	100.0	DNU
Vancomycin	100.0	100.0	Ciprofloxacin	36.0	20.0
Antibiotic sensitivity	% isolates sensitive May - July 2016 (n= 32)	% isolates sensitive May - July 2018 (n= 51)	Cotrimoxazole	100.0	100.0
<i>P. aeruginosa</i>			Levofloxacin	55.0	43.0
Amikacin	60.0	58.0	Ofloxacin	DNU	33.0
Cefepime	72.0	57.0			
Cefoperazone + sulbactam	68.0	64.0			
Ceftazidime	59.0	67.0			
Ciprofloxacin	34.0	31.0			
Colistin	100.0	100.0			
Gentamicin	55.0	48.0			
Imipenem	70.0	82.0			
Levofloxacin	39.0	33.0			
Meropenem	70.0	88.0			
Polymixin B	DNU	100.0			
Piperacillin	68.0	69.0			
Piperacillin + tazobactam	70.0	80.0			

lk|:qmK ; g lagf PlG6afofl6s ;]g
 ug{/ u/fpg':j f:Yosf]nflu
 xflgsf/s xg ;S5 .

Source: APUA-Nepal poster, 2009

APUA-NEPAL EXECUTIVE COMMITTEE

Dr. Kumud K. Kafle- President
 Dr. Asfaq Sheak- Vice President
 Dr. Bharat M. Pokhrel- General Secretary
 Ms. Kalpana Shrestha- Treasurer
 Mr. Radha R. Prasad- Member
 Dr. Rewati M. Shrestha- Member
 Dr. Pramila Pradhan- Member
 Dr. Iswor L. Acharya- Member
 Dr. Shyam P. Lohani- Member
 Ms. Vabha Rajbhandari- Member

Reader's form

Please send your comments on the following:

1. Usefulness and quality of this newsletter

2. Suggestion for the future topics

3. Any other comments

Name _____

Title _____

Institution _____

Address _____

APUA-NEPAL MEMBER LIST

Life Members

- 1 Dr. Kumud K. Kafle
- 2 Dr. Asfaq Sheak
- 3 Dr. Shyam P. Lohani
- 4 Dr. Bharat M. Pokhrel
- 5 Mr. Radha R. Prasad
- 6 Dr. Rewati M. Shrestha
- 7 Mr. Bimal M. Shrestha
- 8 Dr. Baikuntha Parajuli
- 9 Mr. Tirtha R. Shakya
- 10 Ms. Kalpana Shrestha
- 11 Mr. Gorkha B D.C.
- 12 Mr. Prabhu R. Vaidya
- 13 Mr. Ajudey P. Shrestha
- 14 Dr. Narayan P. Ghimire
- 15 Ms. Vabha Rajbhandari

Ordinary Members

- 1 Dr. Pramila Pradhan
- 2 Dr. Iswor L. Acharya
- 3 Dr. Dharma S. Manandhar
- 4 Mr. Mohan P. Amatya
- 5 Mr. Gajendra B. Bhujar
- 6 Mr. Baburam Humagain
- 7 Mr. Eureka Ranjit
- 8 Mr. Sujan Shrestha
- 9 Mr. Sudeep Basyal
- 10 Mr. Jaya B. Karmacharya
- 11 Mr. Prakash R. Pant
- 12 Dr. Panna Thapa
- 13 Mr. Deependra P. Aryal
- 14 Dr. Shashi Sharma
- 15 Dr. Achut P. Sharma