



DGDA AMR BULLETIN

September 2023 | Issue-4



Do you know?

Using Colistin and Fosfomycin in veterinary treatment is completely prohibited and a punishable offence?

Identify antibiotics with red labeled packaging written "Antibiotic" in it.

Bulletin Issue-4

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DGDA is in the process of formulating the National Guideline on Dispensing, Utilization, and Proper Disposal of Antimicrobial Drugs in Bangladesh, which will provide a comprehensive framework for responsible antimicrobial drug management.

Additionally, we are developing Standard Operating Procedures (SOPs) for establishing Antimicrobial Surveillance in veterinary medicines. To raise mass awareness of the



Major General Mohammad Yousuf

Director General

Directorate General of Drug Administration

Directorate General of Drug Administration (DGDA) is actively working in the ongoing battle against Antimicrobial Resistance (AMR). Our collaboration with WHO Bangladesh has been instrumental in advancing our mission. DGDA recently obtained approval for the Drug and Cosmetics Act 2023, a significant milestone in our fight against AMR. In Section 40(d) of the Act, we have introduced strict measures, imposing fines of up to 20,000 taka for the sale of antibiotics or any other medicine without a prescription from a registered doctor. This is a crucial step in ensuring responsible antibiotic use. We have also been diligently working on the implementation of the red labeling of antibiotic packaging, with 80% of the work already completed. This will help consumers make informed choices about antibiotic usage. Moreover, DGDA is diligently engaged in crafting significant policies, guidelines, SOPs, and materials for advocacy and awareness, and educational campaigns all geared towards addressing AMR through the One Health approach. DGDA remains steadfast in our commitment to combatting AMR in Bangladesh.

Md. Mostafizur Rahman

Director (CC)

Directorate General of Drug Administration & National Focal of AMC surveillance

in Bangladesh



importance of responsible antibiotic use, DGDA is actively creating a range of educational materials. We understand the significance of educating the public and healthcare providers in curbing AMR. As a National Focal, I want to reassure you that DGDA AMR Cell will continue to work tirelessly in this critical endeavor.

The DGDA AMC cell organized four training programs aimed at enhancing AMC surveillance in Bangladesh

DGDA has established the Antimicrobial Consumption (AMC) Surveillance system in Bangladesh and has also submitted anti microbial consumption data from 2015 to 2020 to the WHO-GLASS platform in 2022. In collaboration with WHO Bangladesh, DGDA organized four separate programs (25th January 18th, 19th, and 25th July) with the participation of representatives from the selected pharmaceutical company who play a vital role in Antimicrobial Consumption (AMC) Surveillance in



Bangladesh. Many of these companies were not familiar to the required data format, resulting in extensive follow-ups from DGDA. As DGDA submits these data to the

international WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS AMC portal), so it is imperative to ensure the accuracy of these data to facilitate proper interpretation so that well-informed policy decisions can be facilitated.

These training programs not only made the participants familiar to the correct data format but also addressed their questions and concerns.



Pic : Meeting on AMC/AMU Surveillance in Bangladesh through consultative workshops with pharmaceutical company and DGDA officials.

Meeting of Taskforce to monitor antimicrobial consumption (AMC) surveillance in Bangladesh



Meeting of Taskforce for AMC to monitor Antimicrobial consumption/Use in Bangladesh

On September 3, 2023, a Taskforce meeting was conducted to monitor Antimicrobial Consumption/Use (AMC/U) in Bangladesh. Concern participants for AMC/U monitoring in Bangladesh attended this meeting and provided their feedback and

reviewed the AMC surveillance report for 2021, the National Guideline on Dispensing, Use, and Disposal Management of Antimicrobial Drugs in Bangladesh. In addition, the meeting authorized the Standard Operating Procedure (SOP) for AMC Surveillance in

veterinary medicines, and awareness materials developed in collaboration with WHO Bangladesh for World AMR Awareness Week (WAAW) 2023.

Director General of the DGDA chaired the meeting. Representatives from important stakeholders like CDC, IEDCR, DLS, BLRI, BSMMU, DOF, FAO, USAID, USP-PQM+, BHB, Fleming Fund Bangladesh Country grant and WHO Bangladesh were present at the meeting.

The Taskforce members commended on these documents developed by DGDA and approved the AMC surveillance report for 2021. They recommended to form a working group to identify the reasons behind the high consumption of antimicrobial drugs in 2021 and to make necessary policy decisions.



Pic : Meeting of Taskforce for AMC to monitor Antimicrobial consumption/Use in Bangladesh

Consultation meeting with stakeholders to develop SOP for AMC/U for veterinary medicine in Bangladesh

Three meetings were convened on July 25th, 26th, and 27th, 2023, with the active participation of multiple stakeholders, including BLRI (Bangladesh Livestock Research Institute), DLS (Department of Livestock Services), the Department of Fisheries, Fleming Fund, BHB (Better Health

methodology.

During discussions, a significant gap was identified in establishing a methodology tailored specifically to Bangladesh. The primary challenge revolves around determining the denominator population correction unit (PCU), for which we need precise data regarding the "Average weight at

initiate a pilot surveillance program based on available data from European and Thai sources. Once the appropriate data has been collected and verified, DGDA will be able to formulate comprehensive guidelines for monitoring AMC in veterinary medicines, leveraging the insights gleaned from the pilot study.



Pic : Stakeholder consultation meeting to develop SOP for AMC/U for veterinary medicine in Bangladesh

Bangladesh), UN FAO, WHO, and DGDA officials. The primary objective of these meetings was collaboratively developing Standard Operating Procedures (SOP) for the antimicrobial consumption surveillance of veterinary medicines. Following extensive discussions and deliberations, a comprehensive SOP has been successfully developed, complete with a

the time of treatment (Aw)" in kilograms for various livestock and poultry species, including chicken, duck, cattle, buffalo, sheep, and goat. Presently, there is a dearth of concrete data available within the country to ascertain this crucial denominator.

In the interim period, until the "Average weight at the time of treatment (Aw)" in kilograms has been determined, DGDA intends to

The primary challenge revolves around determining the denominator population correction unit (PCU), for which we need precise data regarding the "Average weight at the time of treatment (Aw)" in kilograms for various livestock and poultry species, including chicken, duck, cattle, buffalo, sheep, and goat.

DGDA Shaping Tomorrow's Advocates: Empowering the Next Generation in Bangladesh to Confront AMR

The report on The global consultation meetings on Awareness-raising on Antimicrobial Resistance (June 28-30 and July 5-7, 2022) emphasized the significance of targeting children, students, and youth. It is crucial to focus on individuals from primary school to university levels, as they represent a significant demographic for future healthcare providers and consumers. Addressing this issue and raising

awareness about Antimicrobial Resistance (AMR) for future generations is a significant mission of the Directorate General of Drug Administration (DGDA) in Bangladesh. However, it is important to note that absence of AMR related tropics in the board books within the country. Recent initiatives undertaken by the DGDA have shown a strong positive response to AMR comic books and art competitions among schoolchildren. As a result, the

DGDA organized AMR awareness programs at the school level in Cox's Bazar, Dhaka, and Chittagong. During these programs, various awareness materials were distributed, including children's comic books like "Tinu Minu and Super Bug" and "The Thoughts of Tapa-Gopi," which address the issue of One Health. Additionally, they introduced comic posters and an antibiotic coloring book titled "The Invention of Penicillin."





During the school-level AMR awareness program at Chattogram Cantonment Public College, DGDA conducted an experimental study titled "Assessing the Impact of Antimicrobial Resistance Awareness Interventions Among School Children in Selected Districts/Upazilas of Bangladesh: A Pilot Study" among students in classes VIII to X. This pilot study aimed to investigate whether different modes of effective communication tools could induce a positive social behavioral change among schoolchildren. The program spanned three days, with two days allocated to activities such as comic reading, storybooks, presentations, and animated presentations on AMR, while one day was reserved for an art competition and prize distribution. Before the intervention, students in classes VIII to X participated in a pre-survey, and after the intervention, they took part in a post-survey. The analysis revealed a positive



impact on AMR awareness resulting from the program. The Directorate of Secondary and Higher Education (DSHE) and the National Institute of Preventive and Social Medicine (NIPSOM) also collaborated with the DGDA to participate in these programs and played a vital role in motivating the students.



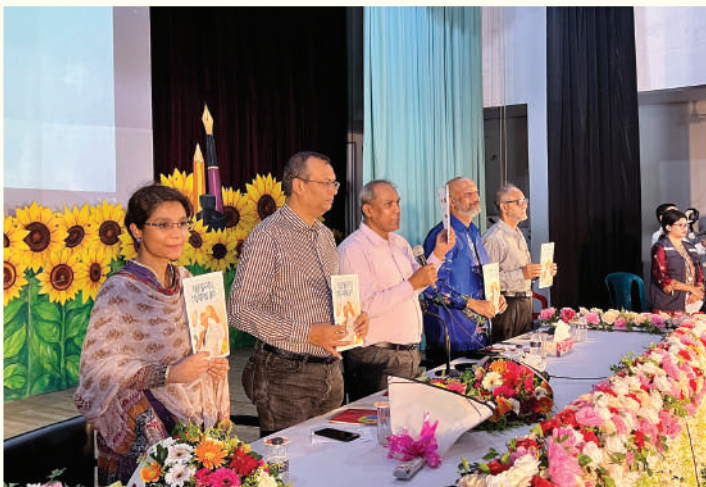


Pic : Awareness Campaign on Chottogram Cantonment Public College, Chottogram.



DGDA arranged a school level awareness Campaign on Antimicrobial Resistance (AMR).

Chottogram Cantonment Public College, Chottogram.

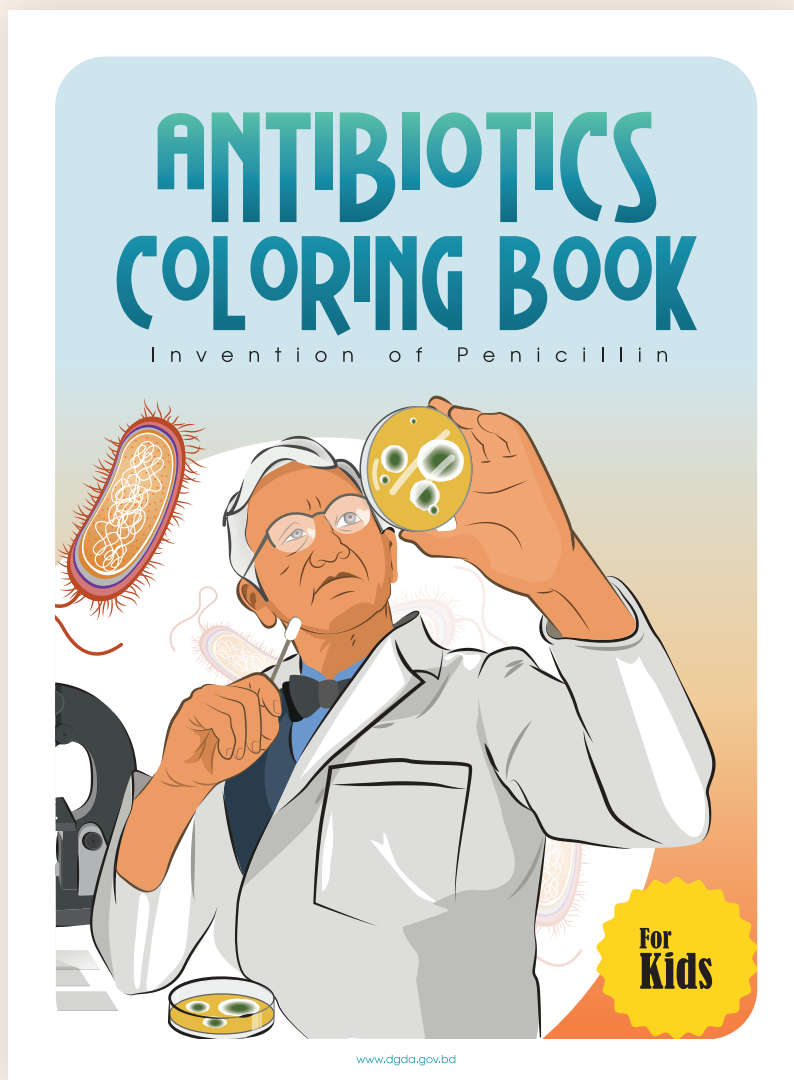


The Directorate of Secondary and Higher Education Bangladesh has granted DGDA to distribute AMR awareness materials, which include the comics book "Tinu-Minu & Super Bug," the Antibiotic Coloring Book "Invention of Penicillin," and the comics poster, to all secondary-level schools under the jurisdiction of the Directorate of Secondary and Higher Education Bangladesh.

Antibiotic coloring book "The Invention of Penicillin"

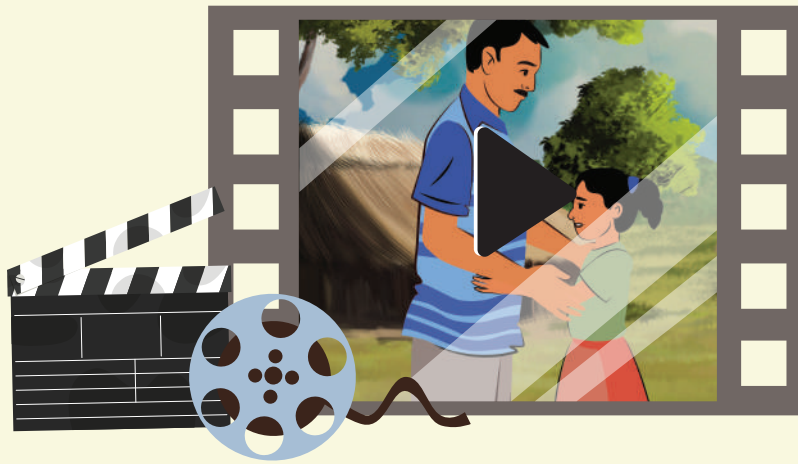
To raise awareness about AMR issues among school-going children, DGDA introduced an antibiotic coloring book titled "The Invention of Penicillin." Children enjoy coloring pictures, and in this coloring book, DGDA has incorporated the story of the discovery of Penicillin. This approach allows children to learn about this critical issue while having fun.

During the school-level AMR awareness program at Chattogram Cantonment Public College, Director General of DGDA Major General Mohammad Yousuf, along with Prof. Sayed Moinul Hasan, Deputy Director (Special) at the Directorate of Secondary and



Higher Education (DSHE), and Mr. Md. Khalid Shaifullah, Assistant Director (Special) at the Directorate of Secondary and Higher Education (DSHE), unveiled the antibiotic coloring book titled "The Invention of Penicillin" and distributed it among 250 children.

http://www.dgda.gov.bd/sites/default/files/files/dgda.portal.gov.bd/files/7ed84f7b_5aa0_41c9_a820_0d18dbbd638e/2023-10-12-09-00-da75c9534f51d426b22fbae531253c18.pdf



Converted Comic Book: Tinu-Minu and Super Bug into Animation

In the 2022 World Antimicrobial Awareness Week, DGDA introduced an AMR awareness comic book titled "Tinu-Minu and Super Bug." DGDA conducted various activities to educate school-going children and distributed 5000 comic books. Through the experiences gained from these awareness programs, DGDA recognized the popularity of this comic book, and children

showed a keen interest in obtaining a copy.

As a result, DGDA, with the support of WHO-Bangladesh, has taken steps to create a more effective approach. They introduced an animated version of "Tinu-Minu and Super Bug," accompanied by a theme song by Mr. Khayam Sanu Sandhi. This initiative is set to be inaugurated during the World AMR Awareness Week in 2023.



DGDA on developing AMR Awareness posters



The DGDA has created a series of 10 impactful posters to combat Antimicrobial Resistance (AMR). These posters cover a range of crucial issues related to rational use of antimicrobial medicines especially antibiotic and antifungal use, each serving a specific purpose in raising awareness about these critical health concerns.

In Bangladesh, there is a widespread lack of awareness among the population regarding Antimicrobial Resistance (AMR) and the detrimental consequences of improper disposal of antimicrobial medications. The posters advise responsible disposal of antibiotics, highlight the prohibition of specific veterinary antibiotics, and discourage these antibiotics use in

animal farming to prevent the misuse and overuse of these drugs, which are primary drivers of AMR. These posters focus on the importance of obtaining antibiotics and antifungals only under the guidance of registered physicians, discourage self-medication and the sharing of medications to ensure appropriate and effective antibiotic use.

Furthermore, DGDA has included information about fungal infections and antifungal resistance in its efforts to aware both hospital staff and healthcare professionals. These posters draw attention to the life-threatening consequences of fungal infections, emphasizing the importance of infection control practices, immediate testing, and treatment to save lives. These

posters also address the emerging issue of Antifungal Resistance, attributing its rise to climate change and advocating preventive measures like mask-wearing and proper medication adherence.

These topics are necessary to make people aware of the risks associated with improper antibiotic and antifungal use, as well as the broader consequences of AMR and fungal infections on public health. By disseminating this information, DGDA aims to empower individuals to make informed decisions about medication use, reduce the spread of resistance, and ultimately protect both their own health and the efficacy of essential antimicrobial treatments for future generations.

মেয়াদোত্তীর্ণ, নষ্ট হওয়া এন্টিবায়োটিক মাটি, পানি বা ময়লা আবর্জনার সাথে না ফেলে আপনার নিকটস্থ ফার্মেসীতে ফেরত দিন

ফার্মেসী

রেজিস্টার্ড চিকিৎসকের প্রেসক্রিপশন ছাড়া
এই ফার্মেসীতে এন্টিবায়োটিক বিক্রয়
বিষয় বিজ্ঞত হয় না।

ওষধের বক্স বা মোড়কে "শাল চিকিৎক এন্টিবায়োটিক" লিখা দেখে এন্টিবায়োটিক চিনুন।

স্বাধিক ও কারিগরি
সংযোগকারী: **Sweden**
Sverige

- ✓ রেজিস্টার্ড চিকিৎসকের পরামর্শ ছাড়া এন্টিবায়োটিক সেবন করবেন না।
- ✓ ব্যক্তিগত পথে ধাক্কা বা আঘাত অন্য সদস্যদের এন্টিবায়োটিক ভাগাভাগি করে যাবেন না।
- ✓ রেজিস্টার্ড চিকিৎসকের প্রেসক্রিপশন মোতাবেক এন্টিবায়োটিকের পূর্ণ কোর্স সম্পন্ন করুন।

ওষধের বক্স বা মোড়কে "শাল চিকিৎক এন্টিবায়োটিক" লিখা দেখে এন্টিবায়োটিক চিনুন।

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ফাংগাল মেনিনজাইটিস একটি বিরল, প্রাণঘাতী ছত্রাক সংক্রমণ

একবার লক্ষণ শুরু হলে, ফাংগাল মেনিনজাইটিস চিকিৎসা করা কঠিন। প্রতিটি মুহূর্ত প্রত্যুত্তরূপ, অগোচর না করে চিকিৎসা শুরু করুন।

হাসমানতানে ইনফেকশন প্রাথমিক ও এড কন্ট্রোল গ্র্যান্ডিস হওয়ায়কারে না করা হলে চিকিৎসা ব্যস্ততার সময় ফাংগাল মেনিনজাইটিস সংক্রমিত হতে পারে।

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ফার্মেসীতে এবং ঔষধ বিক্রয়কার প্রতি নির্দেশনা

- ❌ রেজিস্টার্ড চিকিৎসকের প্রেসক্রিপশন ছাড়া এন্টিবায়োটিক বিক্রি করা একটি শাস্তিযোগ্য অপরাধ।
- ❌ রেজিস্টার্ড চিকিৎসকের প্রেসক্রিপশন ছাড়া কোনোভাবে এন্টিবায়োটিক সেবনের পরামর্শ প্রদান এবং বিক্রি করা হতে বিরত থাকুন।

ওষধের বক্স বা মোড়কে "শাল চিকিৎক এন্টিবায়োটিক" লিখা দেখে এন্টিবায়োটিক চিনুন।

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এন্টিফাংগাল রেজিস্ট্যান্স সম্পর্কে সচেতন হই

রেজিস্টার্ড চিকিৎসকের প্রেসক্রিপশন অনুযায়ী এন্টিফাংগাল ঔষধের ফুল কোর্স সম্পন্ন না করা এবং জনবহুল পরিবেশে অপরিষ্কার-অপরিচ্ছন্ন জীবনযাত্রা এন্টিফাংগাল রেজিস্ট্যান্সের অন্যতম কারণ।

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এন্টিফাংগাল রেজিস্ট্যান্স সম্পর্কে সচেতন হই

ফাংগাল ইনফেকশনকে অবাধেলা করাবেনা। এটি মৃত্যুর কারণ হতে পারে। যেকোনো ফাংগাল ইনফেকশনে রেজিস্টার্ড চিকিৎসকের পরামর্শ নিন।

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Stakeholder consultation meeting to develop the National Guideline on Dispensing, Use, and Disposal Management of Antimicrobial Drugs-Bangladesh



Three stakeholder consultation meetings were held dated 16-17 July and 31 August 2023 to formulate the National Guideline on Dispensing, Use, and Disposal Management of Antimicrobial Drugs-Bangladesh. According to section 5.1.9, 7.2.1, 7.2.2, 7.2.3 and 7.2.5 of National Strategy and Action Plan for Antimicrobial Resistance Containment in Bangladesh (2021-2026), formulation of this guideline has been undertaken. The Director General of the DGDA presided over these sessions. The initial two meetings involved DGDA officials collaborating with a few

development partners to gather their input and shape the guideline. The third meeting was a comprehensive gathering that included key stakeholders such as CDC, IEDCR, DLS, BLRI, DOF, FAO, USP-PQM+, BHB, DGDA officials, and WHO Bangladesh.

The meetings proved instrumental in collecting invaluable insights from diverse perspectives. Participants underscored the importance of revisiting the guideline's title for optimal resonance with its objectives. They emphasized the need to augment its comprehensibility through the

integration of illustrative materials, promoting easier comprehension and adoption. There was a call for a more detailed exploration of the incineration process to ensure safe disposal. Additionally, participants urged the concise inclusion of the WHO AWaRe Class of Antibiotics within a two-page framework, streamlining the dissemination of critical information. Beyond this, there was a clear consensus on the necessity to establish robust monitoring mechanisms for antimicrobial usage in animal feed, acknowledging its potential impact on public health and safety.

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Preventing Antimicrobial Resistance Together