

# SUPERHEROES AGAINST SUPERBUGS

Grassroots Comics on Antibiotic Resistance





# **SUPERHEROES AGAINST SUPERBUGS**

**Grassroots Comics created by the students of schools  
and medical colleges in Delhi, Bangalore and Hyderabad  
on the issue of  
Antibiotic Resistance**

**IndiaAlliance**  
**DBT wellcome**



World Comics India

---

Superheroes against Superbugs (SaS) initiative aims to raise awareness of antibiotic resistance and promote community dialogue and action by engaging with young children in India. The SaS pilot program was supported by the public charity the DBT/Wellcome Trust India Alliance. The pilot project was implemented in collaboration with World Comics India, Centre for Cellular and Molecular Biology, Hyderabad and The George Institute of Global Health India.

SaS: [www.superheroesagainstsugbugs.com](http://www.superheroesagainstsugbugs.com)

India Alliance: [www.indiaalliance.org](http://www.indiaalliance.org)

World Comics India: [www.worldcomicsindia.com](http://www.worldcomicsindia.com)

2019–2020

Any part of this book can be used for awareness and educational purposes without any prior permission with due acknowledgement to the source.



## Introduction

Superheroes Against Superbugs (SaS) is a public engagement initiative launched in 2018 with the aim to build a community dedicated to tackle the growing threat of antibiotic-resistant infections in India. SaS programmes aim to engage with the general public to raise public awareness and improve public understanding of this global threat to build a society of smart antibiotic users.

India is at the forefront of the global epidemic of Antimicrobial Resistance (AMR). Studies estimate that 58,000 newborns in India die each year due to infections caused by resistant superbugs. There are currently 700,000 deaths worldwide due to antibiotic resistance (a subset of AMR) and are expected to increase to 10 million by 2050, more deaths than cancer! Antibiotic resistance is a natural phenomenon exhibited by microbes wherein they can resist the toxic effects of antibiotics. Overuse and misuse of antibiotics by us has accelerated the development of antibiotic resistance. The SaS programme emphasises the need for the general public to become superheroes as much as we need our scientists and medical professionals to fight this century's biggest health threat, by improving scientific understanding of antibiotic resistance so that appropriate measures can be taken at an individual and community level.

The SaS pilot programme supported by the DBT/Wellcome Trust India Alliance, partnered with school children in India in this fight against antibiotic resistance by empowering them with knowledge of the issue and equipping them with the tools needed to narrate their own stories around this serious problem in the form of grassroots comics. This unique and novel program, which was recognized at the Call to Action on AMR 2018 as a pioneering initiative and highlighted by the World Health Organisation during the World Antibiotic Awareness week 2018, has been built around the premise that young minds, our superheroes, are capable of influencing behaviours around them and bringing about transformative change when equipped with the right information and tools. The pilot programme has been possible due to successful partnerships with World Comics India, Center for Cellular and Molecular Biology, Hyderabad and The George Institute for Global Health India, New Delhi.

At SaS workshops, we engage with young children on antibiotic resistance through fun and creative hands-on activities, empowering them in the process with knowledge around the issue. These children are then encouraged to weave their own stories around the issue and express their thoughts through the powerful medium of grassroots comics. The children are not only equipped with all the information they need of the problem but are also empowered to narrate their own stories through their own creative work giving them a sense of ownership and excitement, which acts as stimulus for further engagement.

Some of the issues covered in these workshops were; dangers associated with stopping antibiotics mid-course, using antibiotics for viral infections, popping antibiotics without doctor's consultation, environmental pollution with industrial dumping of antibiotics, use of antibiotics in poultry and dairy, and the importance of sanitation and hygiene. In the pilot programme, sixty school children from Telangana Social Welfare Residential

Educational Institutions (TSWREIS), Gowlidoddi and Global Edge School, Hyderabad, participated in the SaS workshops and worked with Sharad Sharma, founder of World Comics India, to weave stories around concepts of antibiotic resistance that were artistically conveyed using the medium of grassroots comics.

Public health researcher, Dr. Rashmi Rodrigues in collaboration with World Comics India conducted grassroots comics workshops for school and medical students in Bangalore. In Delhi, SaS workshops were organized on the side lines of an exhibition titled "Superbugs: The end of Antibiotics?" showcased at the National Science Centre.

The book in your hand is a compilation of selected comics from these workshops. These comics are being used by our young superheroes who are on a mission to spread awareness and initiate a conversation on the issue of antibiotic resistance in their schools, colleges and local communities.

**Together We can Stop the Rise of Superbugs!**

#### **Team SaS**

**Sharad Sharma, World Comics India**

(Creator of this comic book, Grassroots comics Workshop facilitator)

**Sarah Iqbal, DBT/Wellcome Trust India Alliance**

(Lead, SaS)

**Ponnari Gottipati, Consultant Grants Manager, LVPEI, Hyderabad**

(Lead, SaS)

**Somdatta Karak, CCMB, Hyderabad**

(Workshop facilitator)

**Madhuri Dutta, The George Institute for Global Health India, New Delhi**

(Evaluation)

[www.superheroesagainstsbugs.com](http://www.superheroesagainstsbugs.com)

Twitter: @SaSuperbugs

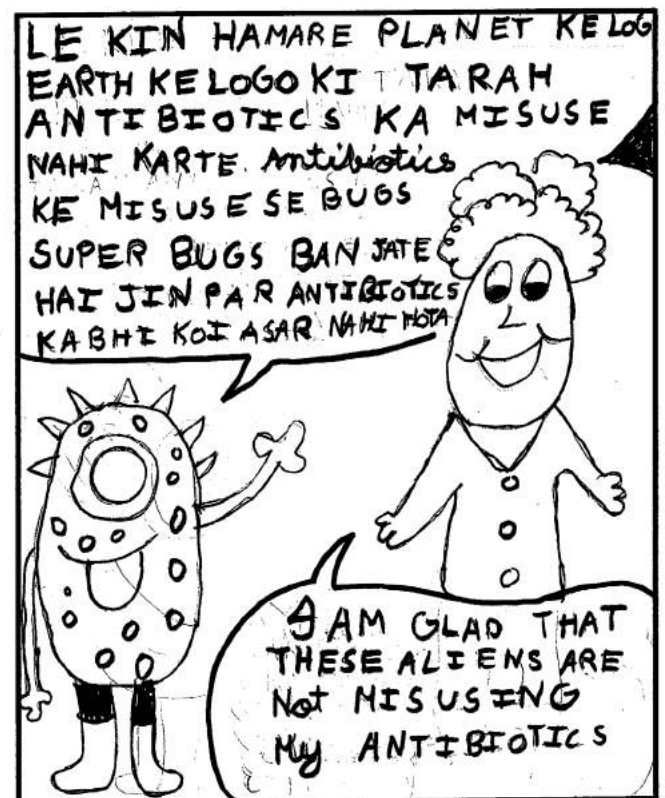
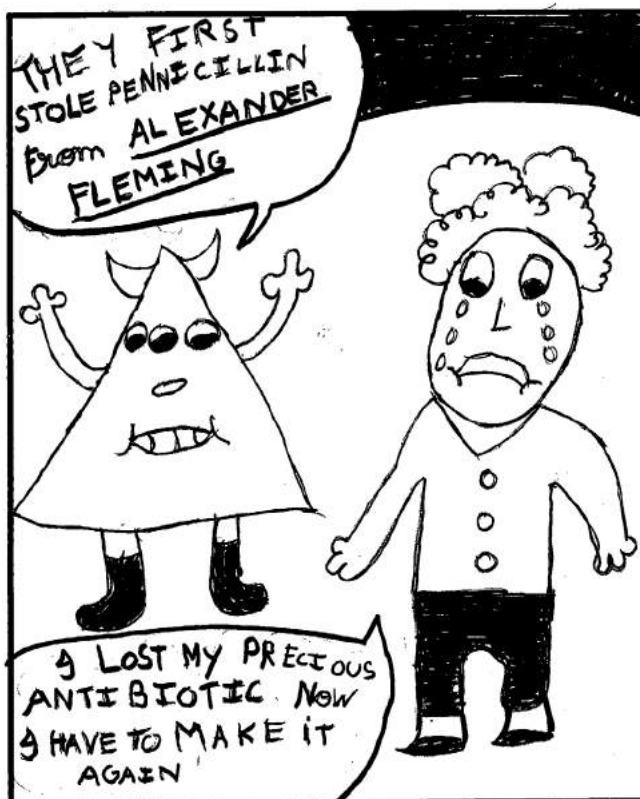
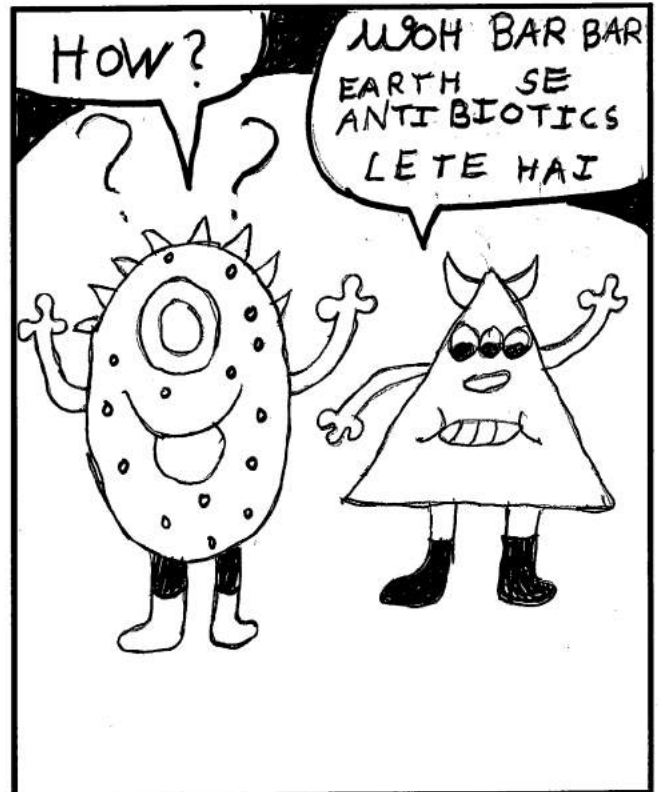
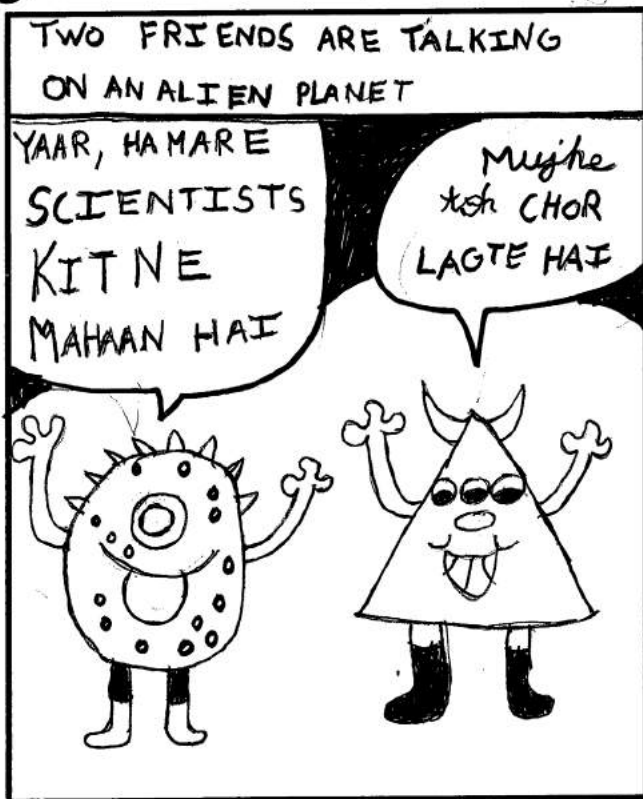
Facebook: @superheroesagainstsbugs



# Background check

What doesn't kill you makes you stronger : Since they were discovered by Alexander Fleming in the 1940s, antibiotics have saved hundreds of millions of lives from life-threatening bacterial infections that were once untreatable. However, in recent times there is an increase in deaths caused by infections once again, as bacteria are developing resistance to these drugs and evolving into 'superbugs' that are becoming difficult to kill with existing antibiotics. The irresponsible use of antibiotics by us is speeding up this process.

# Alexander and Aliens



- OJESH  
DWIVEDI



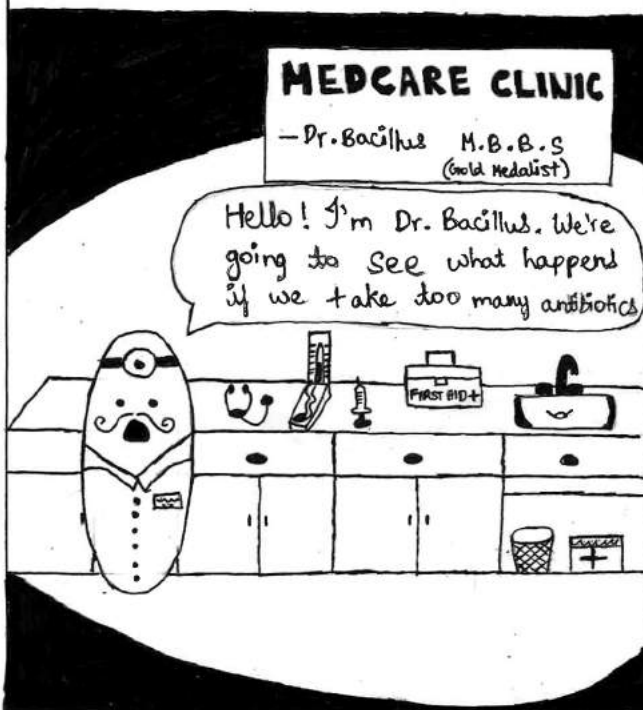
# A RACE TO REMEMBER



N. ARANKSHA

# ★ NOW OR NEVER!

A day in Dr. Bacillus's clinic .....



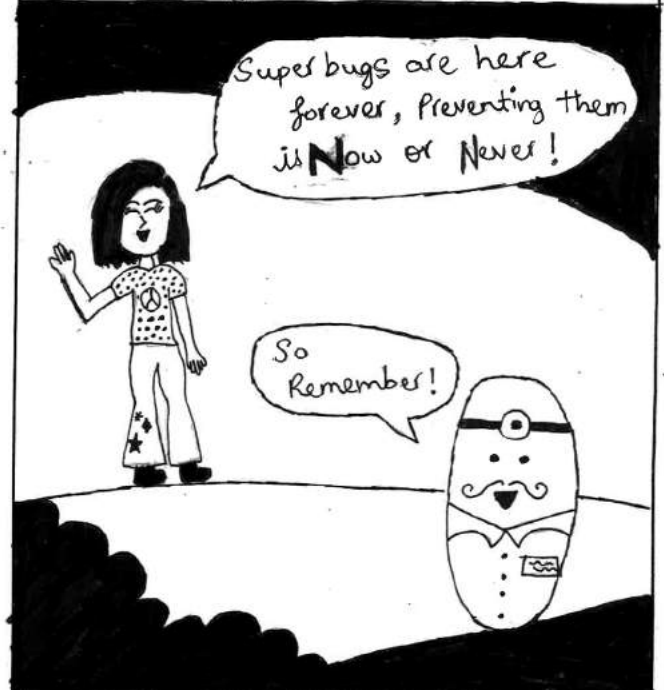
He shows the bacteria through a PPT .....



In the Result Room .....



Finally .....



SRUTHI MANIKONDA

9-B

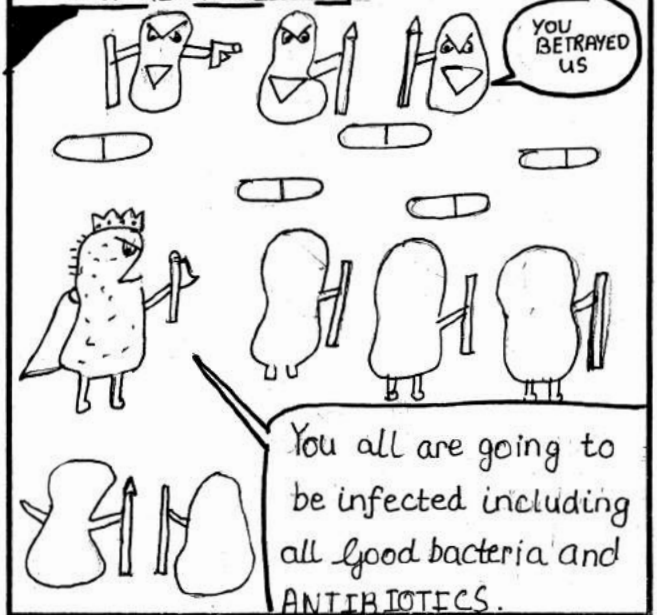


# THE BACTERIAL BATTLE

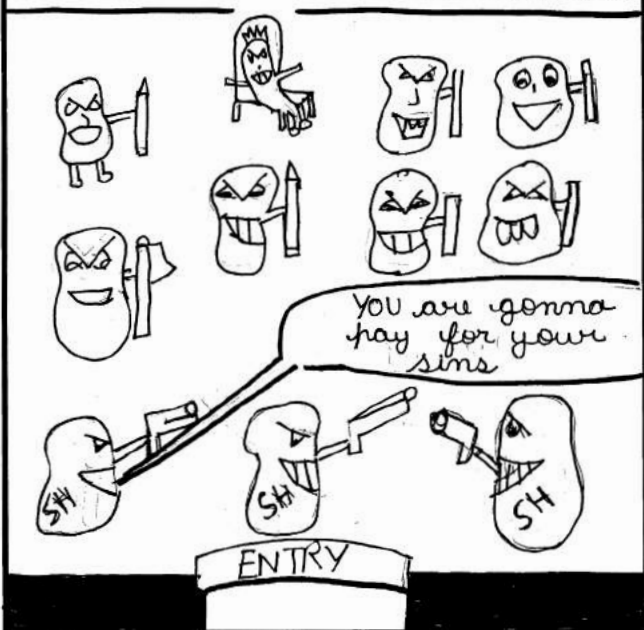
BAD BACTERIA ATTACKING THE FORT (BODY)



WHEN BAD BACTERIA COMMANDER AND ARMY ENTERS THE FORT (BODY). THEY FOUND ANTIBIOTICS LYING ON THE FLOOR WHO WERE AT REST.



BAD BACTERIA TAKE CONTROL OVER THE FORT (BODY). SUPERHEROES VS SUPERBUGS  
SUPERHEROES COME AFTER SOMETIME

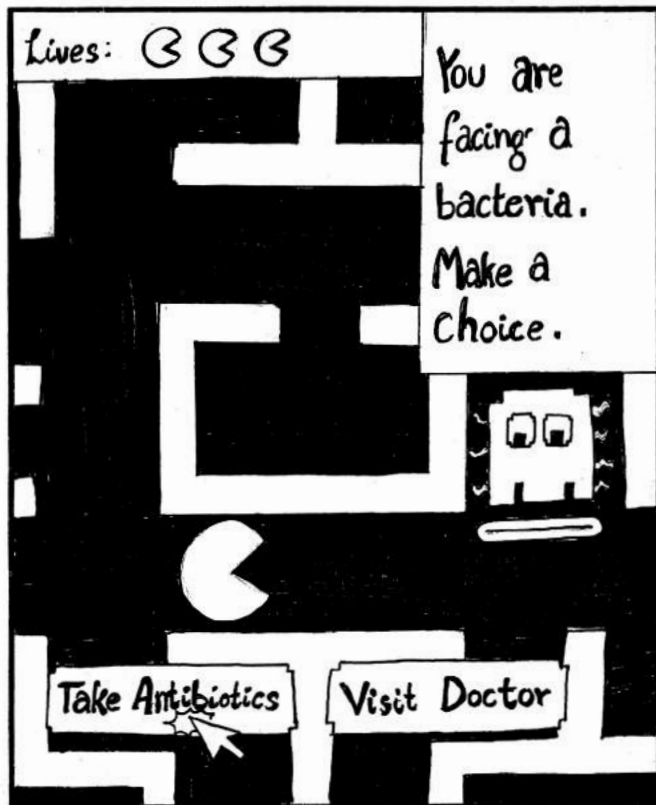


SUPERHEROES KILLED ALL THE SUPERBUGS. THEY ABSORB ALL THE POWERS THAT WERE TAKEN BY THEM.



Parm  
Khurana

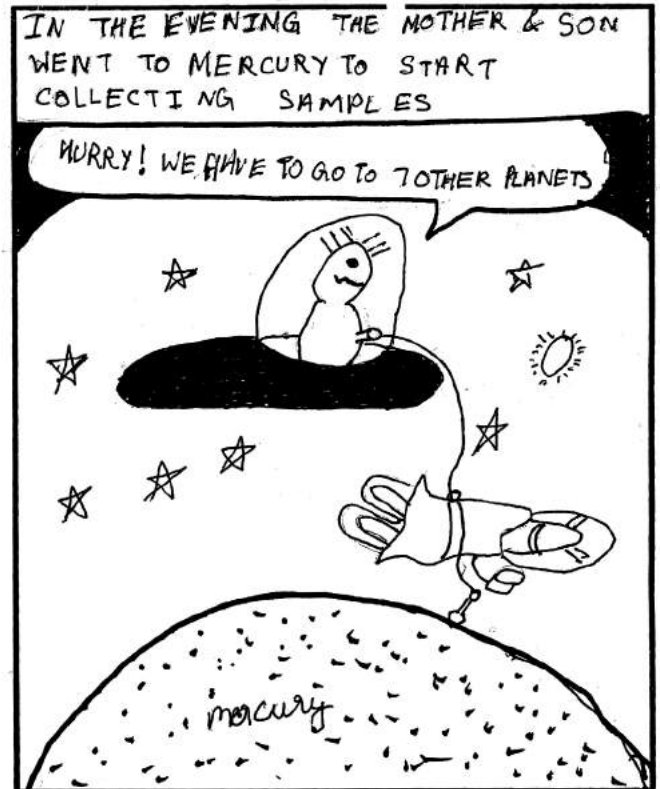
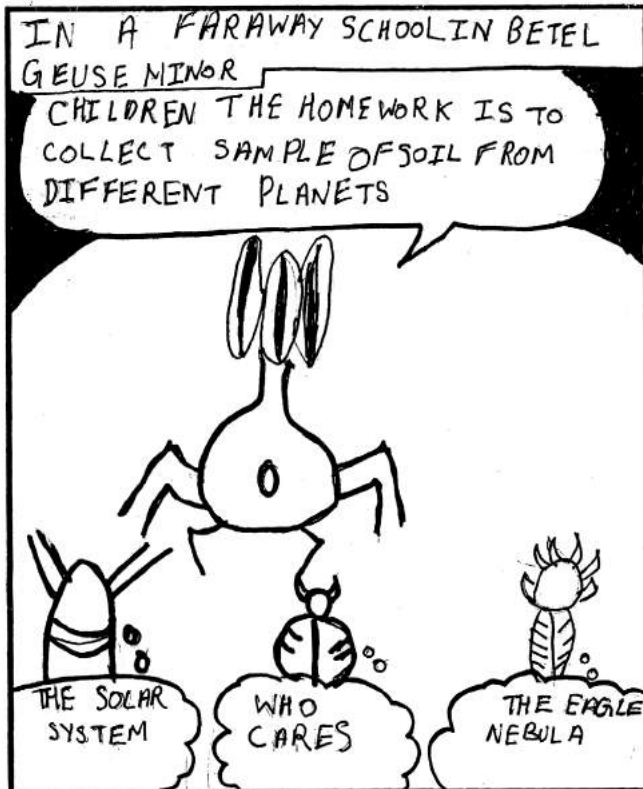
# BACT-MAN



KRITI  
GUPTA



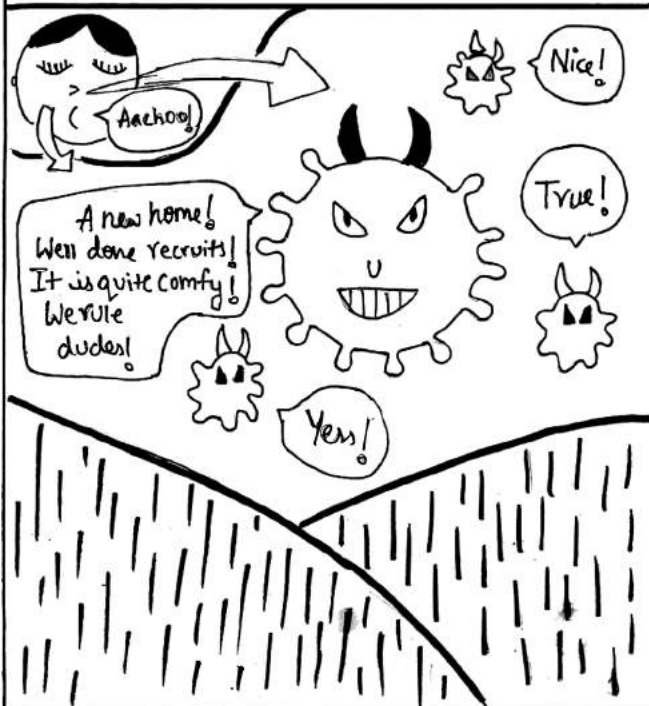
# NOT AN ALIEN PROBLEM



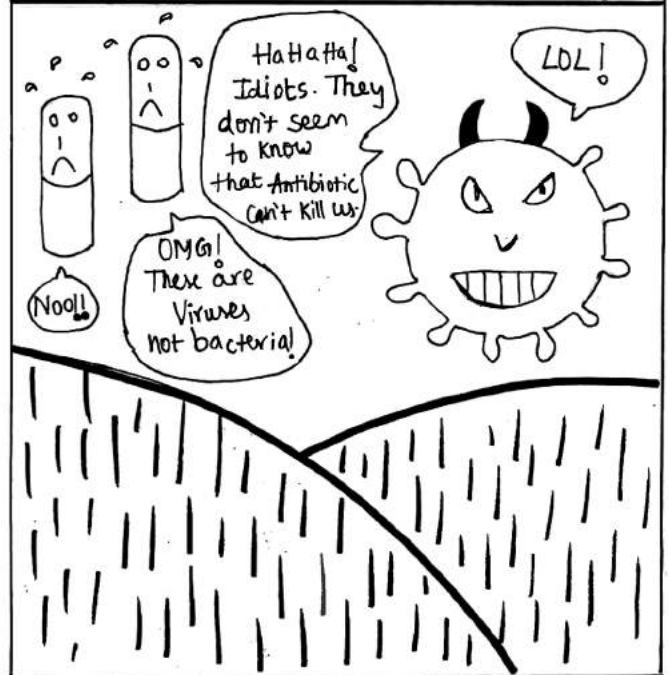
ANANT SINGH

# PROPER USE, PERFECT USE!

MIMI HAD A TOUGH DAY. SNEEZING ALL DAY!  
SHE WAS ATTACKED BY THE FLU VIRUS!!



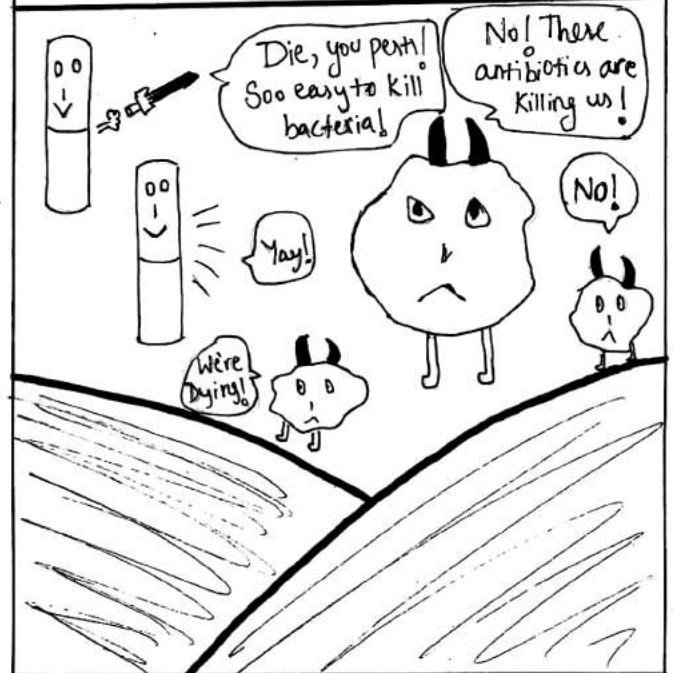
MIMI'S MOTHER GIVES HER AN ANTIBIOTIC  
WITHOUT THE DOCTOR'S CONSULTATION. SHE DOES  
NOT KNOW HOW HARMFUL IT CAN BE. IN HER NOSE



AFTER A FEW DAYS, MIMI'S FRIEND CARLY  
DEVELOPS WHOOPING COUGH, A BACTERIAL  
CHAOS. IN HER THROAT:~



CARLY'S MOM GOES TO THE DOCTOR AND GETS  
ANTIBIOTICS WITH HIS CONSULTATION. THEY  
HELP CARLY GET BETTER.



- Ananya Reddy R



# JUST ANOTHER DOSE.

ONCE UPON A TIME IN A FAR-AWAY VASCULAR COMPARTMENT OF A HUMAN, BACILLUS RODREGUES HEAD OF COLONY 'A', MET BACILLUS GADOT, HEAD OF COLONY 'B'.

HEY MAN! IT'S 2018 AND YOU GUYS STILL HAVEN'T GOT RESISTANCE? HOW SAD!

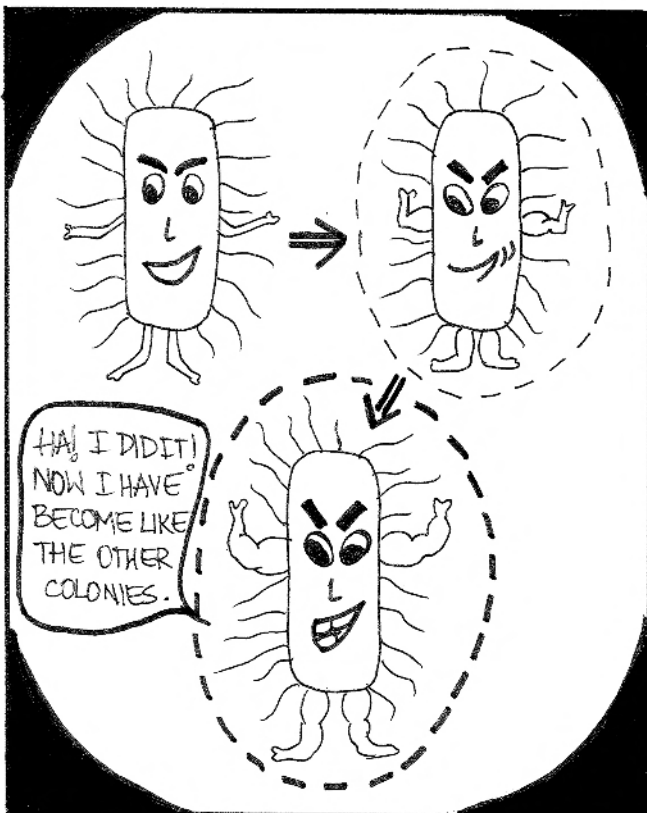
NO, MAYBE ANOTHER DOSE AND MY COLONY AND I CAN GET RESISTANT TOO.

MEANWHILE, THE HUMAN....

OH! I STILL FEEL SICK, MAYBE I SHOULD POP THE 12TH DOSE OF THIS MEDICINE.

UNRESISTANT BACILLI

HE'S TAKING IT! IT'S HAPPENING!!



THE COCCI ENCOUNTER THE RESISTANT BACILLI IN THE VASCULAR COMPARTMENT

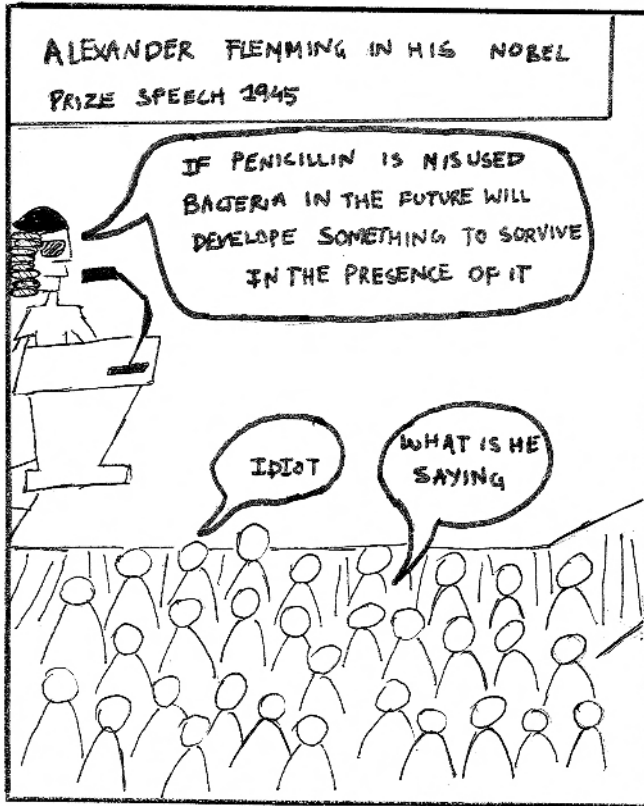
STUPID HUMAN! HE THOUGHT THAT HE COULD KILL US WITH SO MANY DOSES. NOW WE'RE GONNA KILL HIM!

HI! WE'RE COCCUS. HOW DID Y'ALL DO THAT?

HOLD ON, YOU'LL SOON GET RESISTANT IF HUMANS LIKE HIM EXIST!

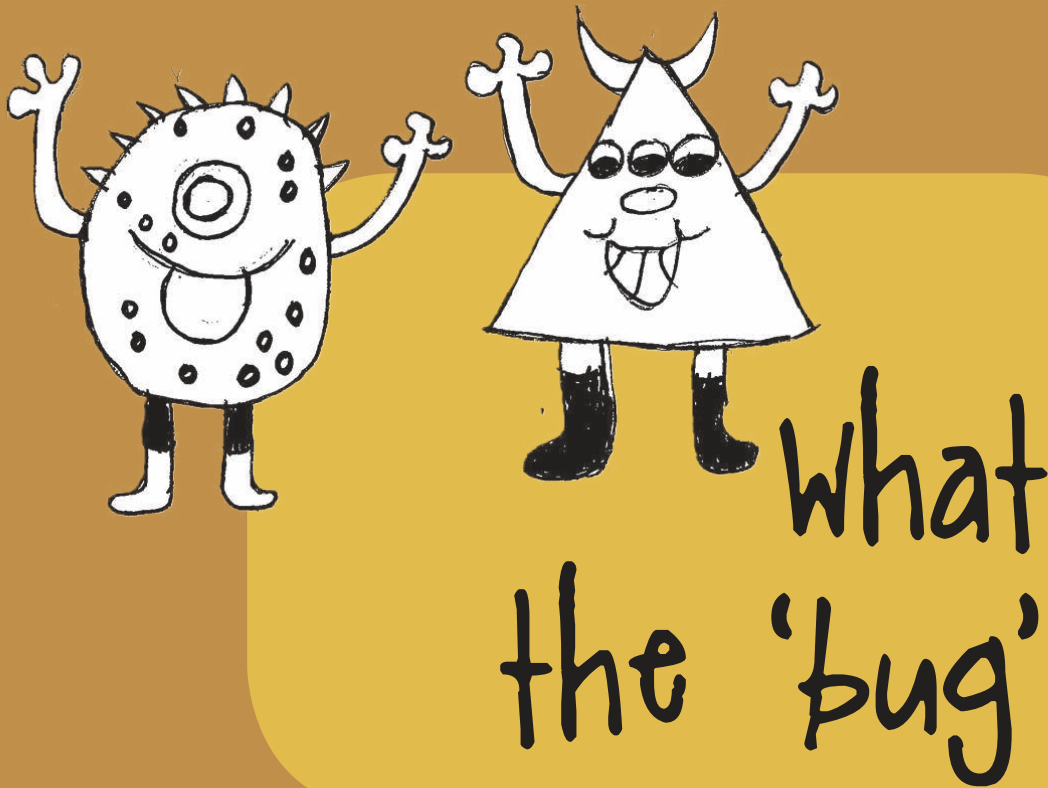
- RAKSHA RUDRAMURTHY

# WHO'S THE IDIOT NOW?



—MAHEK FATIMA





Antibiotics are chemicals made by bacteria and fungi to kill other bacteria. We have been using these naturally occurring medicines to treat bacterial infections from tuberculosis and pneumonia, to boils and sore throats. But not all bacteria cause diseases – many good bacteria reside in our body and are important for our overall health and well-being. In order to develop new antibiotics or to stop the rise of superbugs, we need to understand how and why bacteria is evolving so fast into antibiotic-resistant bugs.

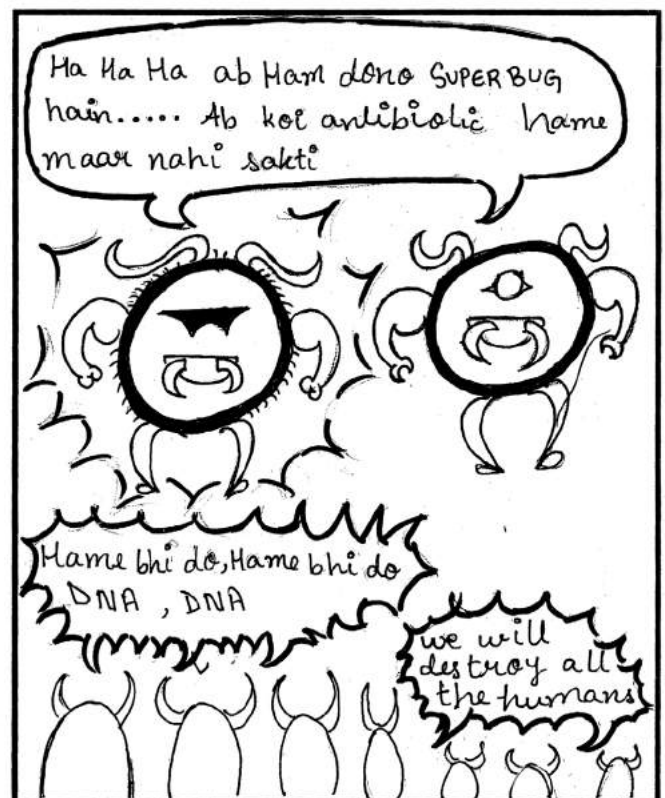
# MOULDY

# SOLUTION



- MATHILI SINGH

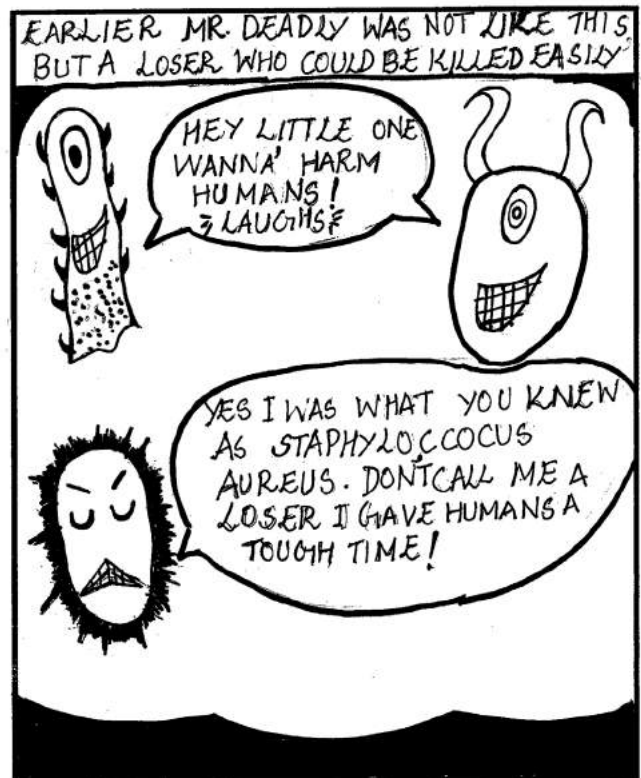
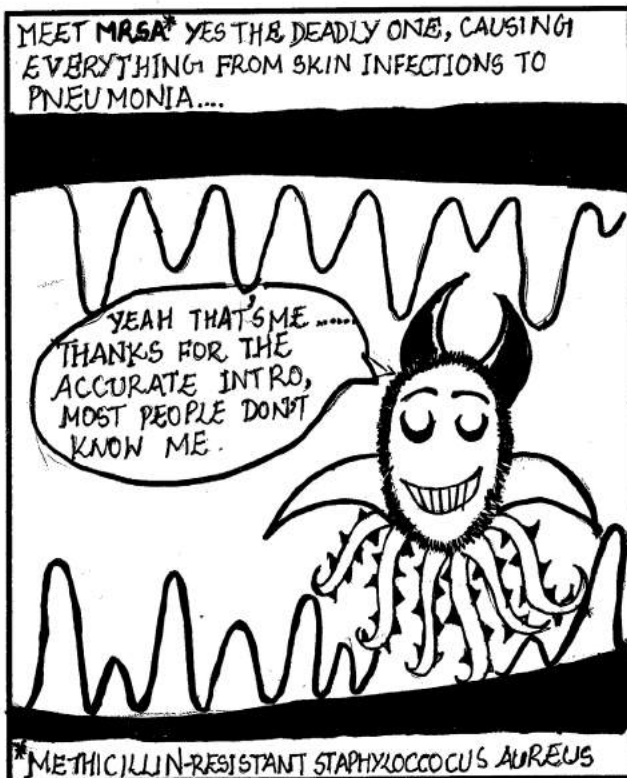
# BHAI DNA DEGA KYA



MADHAV  
RUDRAKSH



# A MICROBIAL Tale



Ruturri  
Bhagat  
VIII

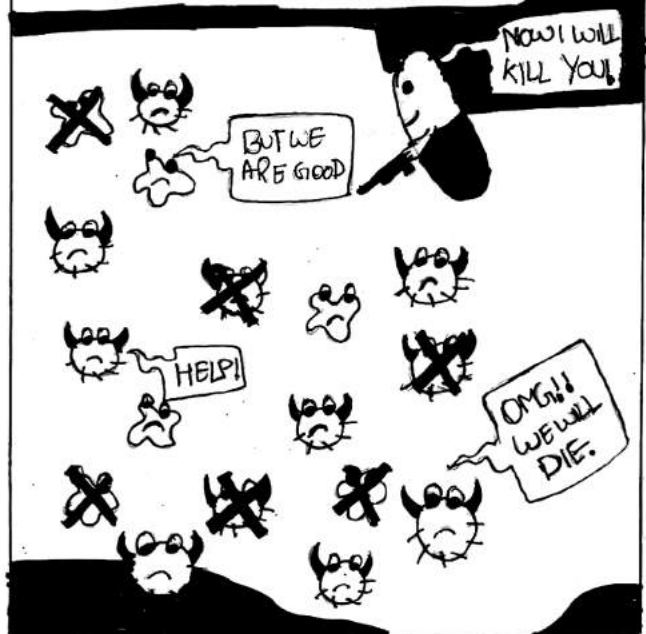
# SUPERBUG

# DIARIES

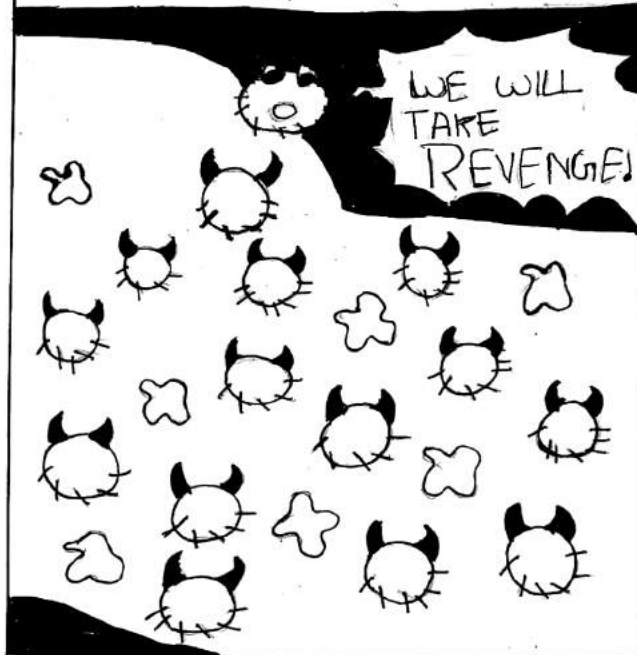
LEA WAS INFECTED BY BACTERIA.  
THE DOCTOR PRESCRIBED AN  
ANTIBIOTIC



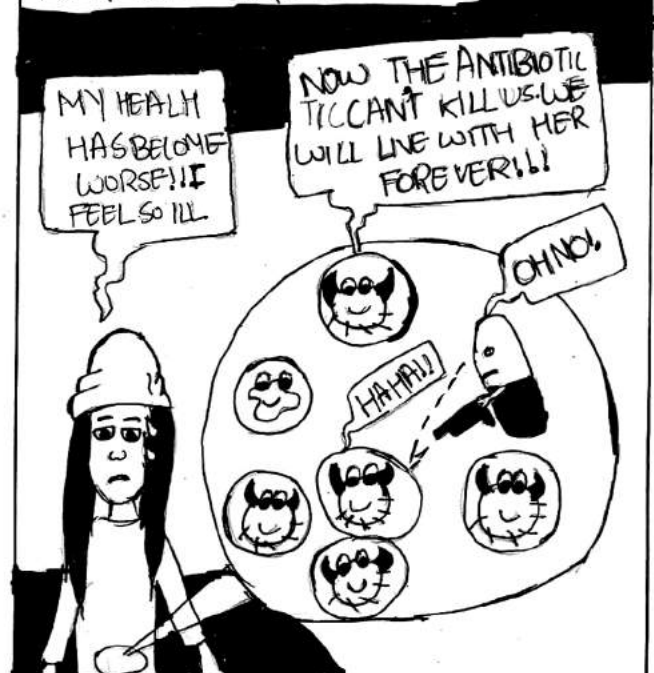
THE MEDICINE MANAGES TO KILL  
A FEW GOOD AND BAD BACTERIA  
BUT OTHERS GET SCARED.



THEY DON'T WANT MORE OF  
THEIR FAMILY MEMBERS TO DIE!



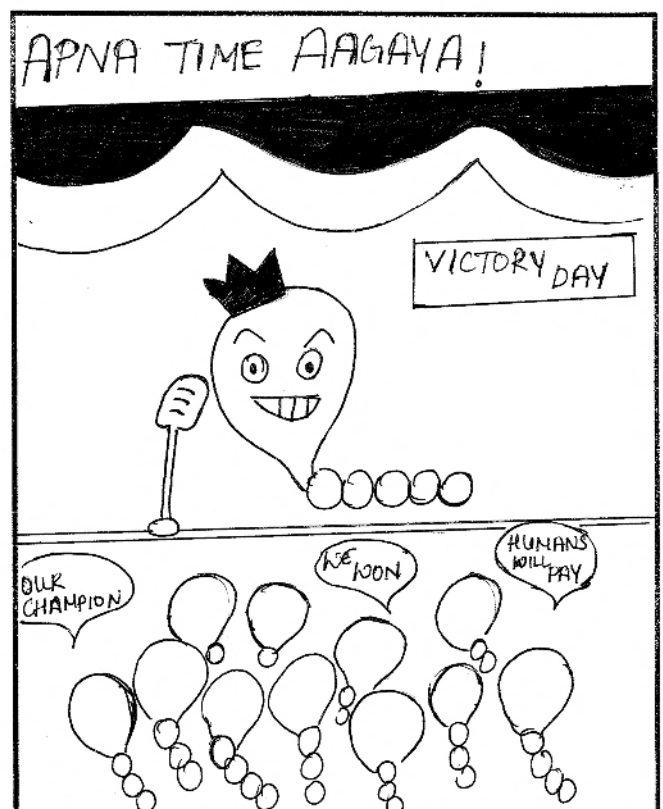
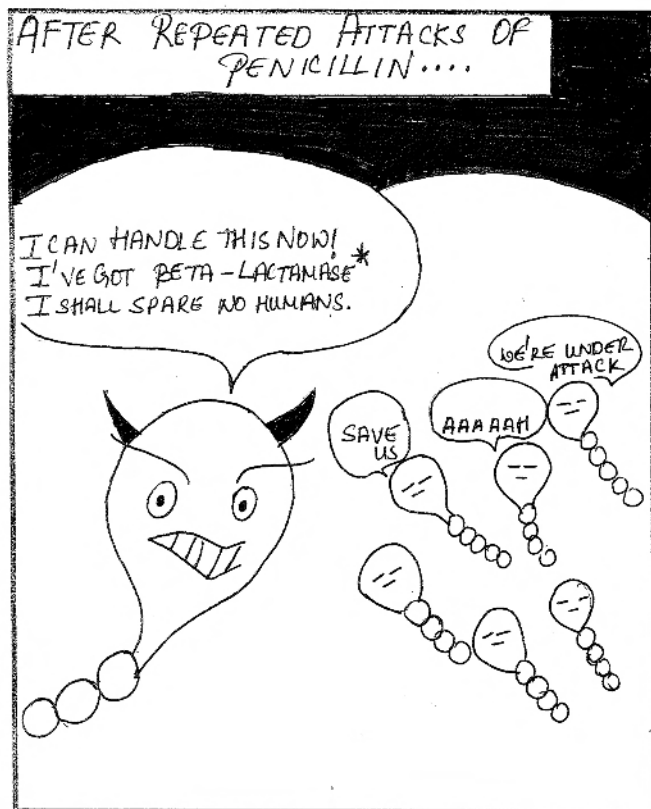
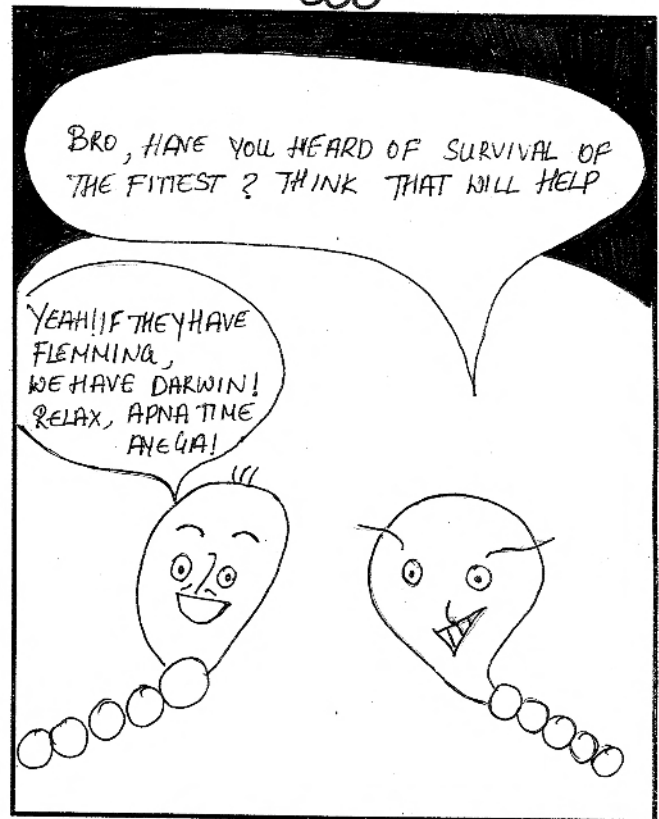
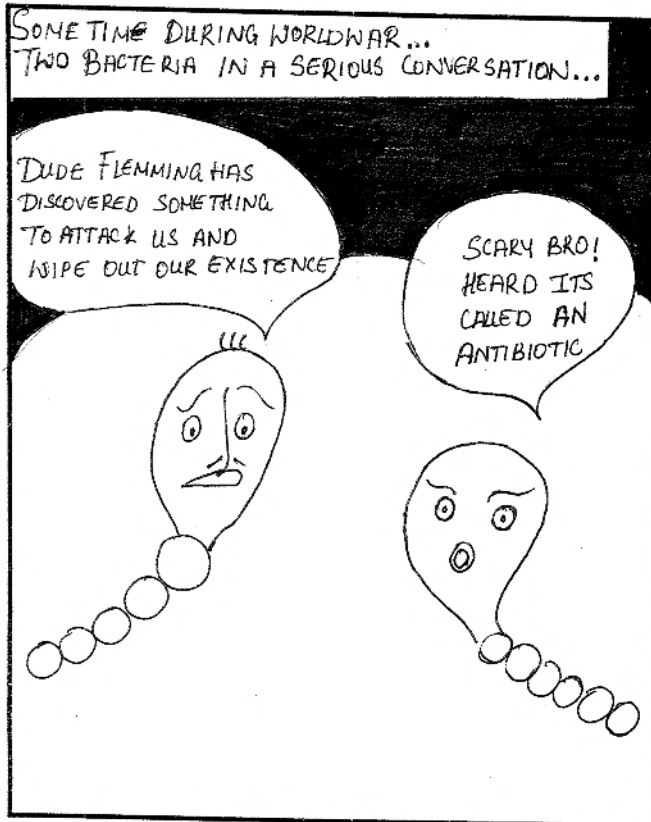
THE BACTERIA MUTATE AND BECOME  
ANTI-BIOTIC RESISTANT.



-SUHANI JAGGI



# A BACTERIA TALE



\*ENZYME THAT DESTROYS PENICILLIN

Priya Ashok



Save Antibiotics  
by using them  
correctly



Studies estimate that 58,000 newborns in India die each year due to infections caused by resistant superbugs. There is significantly high incidence of inappropriate use of antibiotics and resistance in India due to their easy availability and misinformed consumption. Many people take antibiotics without a doctor's prescription for simple common cold that is generally caused by "flu" viruses which cannot be killed by antibiotics. Many do not complete the full course of antibiotics prescribed by their doctor or share their leftover antibiotics with others. This irresponsible use of antibiotics is resulting in the rise of "superbugs" that are becoming harder to kill.

# 7 days VS 1 week

One day, Rahul----



Just then, Rahul's father and mother enter his room--

Son, looks like you've caught a cold. Come, let's go to the doctor.

OK!

Don't Go! Do not take him to the doctor just for a minor cold! Give his immune system a chance to fight!

One week later--

Mom! I didn't take any medicine and now my cold is gone! Wow

See? For a cold, if you take medicine it will take you one week but if you rest, it'll take you 1 day!

D. Girija Svarani

# Mid-Course Crisis

Sarah is sick, so her mother takes her to the doctor



After two days...



After three days...



Next day Sarah becomes even more sick



## THE END

-G.GAYATRI  
IX-B



# WRONG MEDICINE

one evening Amulya came from a school and she was suffering from a stomach pain. a stomach pain

WHENEVER MY PARENTS HAD ANY PAIN THEY GET MEDICINE FROM THE PHARMACY I MUST ALSO GO THERE



Sir please I am suffering from a stomach pain give me a medicine please

OK

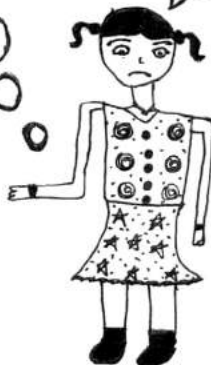
PHARMACY



AFTER FEW DAYS...

I am getting stomach pain again I must buy medicine

Sir, please give me an Antibiotic



WHEN THE PAIN WAS NOT CURED SHE FINALLY GO TO A DOCTOR

After 3 days I am suffering with a stomach pain and I used these many tablets but the stomach pain is not gone

Oh so you have been taking medicine without the doctor's advice that has aggravated the problem



# CARE BUT DON'T SHARE





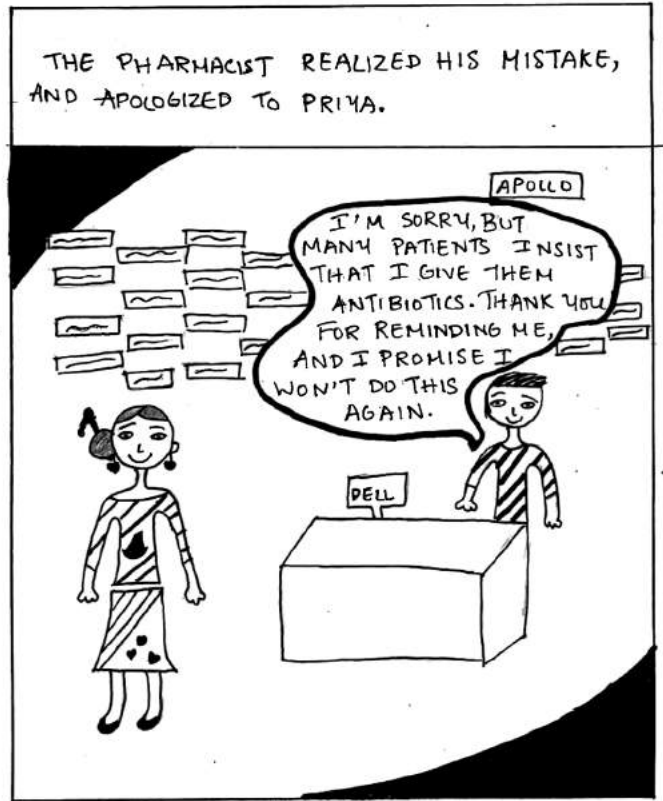
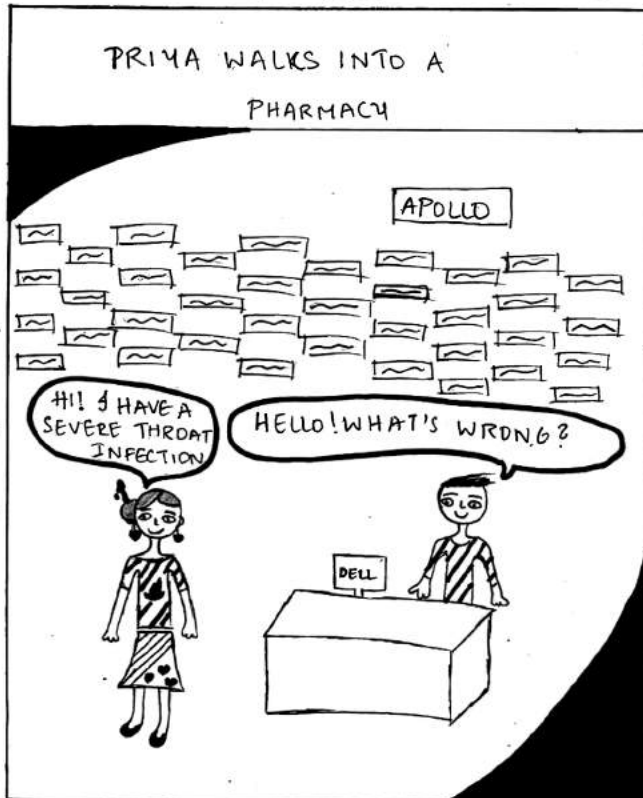
# COSTLY CURE



A. Geetha Sai Sri  
IX-B



# DR. UNOFFICIAL

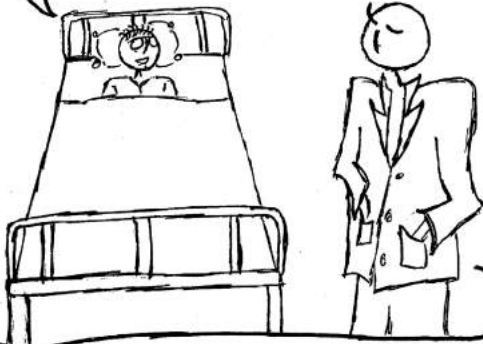


- Shruthi S.

# NEEM HAKEEM खतरा-ए-जान

## GOVERNMENT HOSPITAL

SAHI DOCTOR SAHAB, BAHUT TAKLEEF HAI. KOI ACHHI DAVA DE DIJIYE

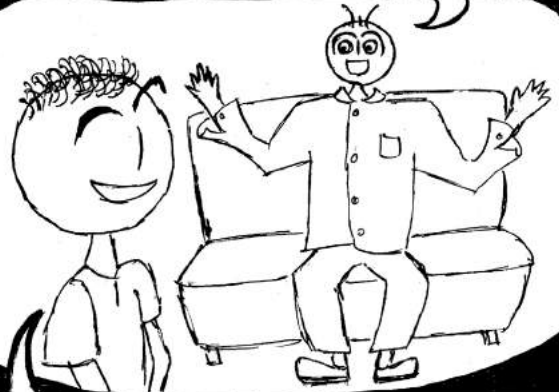


AAPKO BILKUL SAHI DAVA DE RAHA HU ISKO PURE 7 DINON TAK ROZ 1 GOLI SUBAH AUR 1 GOLI SHAAM KO KHAANI HAIN. AUR INKO BEECH ME CHHODIYEGA NAHI . . . !!!

## AT HOME

JHOLACHHAP DOCTOR CHACHAJI

ARREY! TUM YE SAB BEKAR DAVA KHA RAHE HO CHHODO INHE MERI DAVA KHA KAR DEKHO! KAISE JAADU SE THIK HO JAOGE



THIK HAI JHOLACHHAP CHACHAJI JAISA AAP KEHTE HAI VAISE HI KARUNGA

## IN MARKET

NEEM HAKEEM

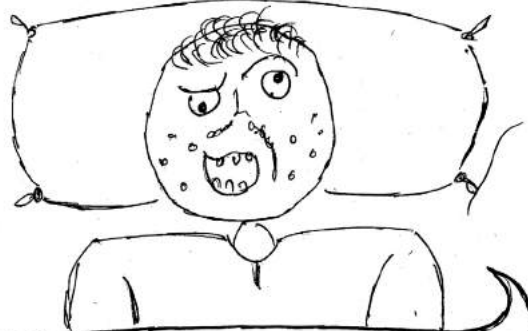
NEEM HAKEEMJI KOI DAVA DIJIYE MAI THIK HO JAAN



TUM TO AB TAK GALAT DAVA LE RAHE THE MERI DAVA LEKAR DEKHO SHARTIYA THIK HO JAOGE . . . !!!

JAB BIMARI THIK NAHI HOTI

AREY! MAI TO MAR GAYA. ALAG ALAG LOGON KI ANTIBIOTIC DAVAIYAN LEKAR . . . VO BHI AADHI ABHURI . . . MAI TO ANTIBIOTIC RESISTANT HO GAYA. AB TO KOI DAVA ASAR HI NAHI KARTI



US PAR SIDE EFFECTS NE HULIYA BHI BIGAAD DIYA AAP KABHI AISA NA KARNA SAHI DOCTOR KI SAHI DAVA PURI LENA

MADHAV  
RUDRAKSH

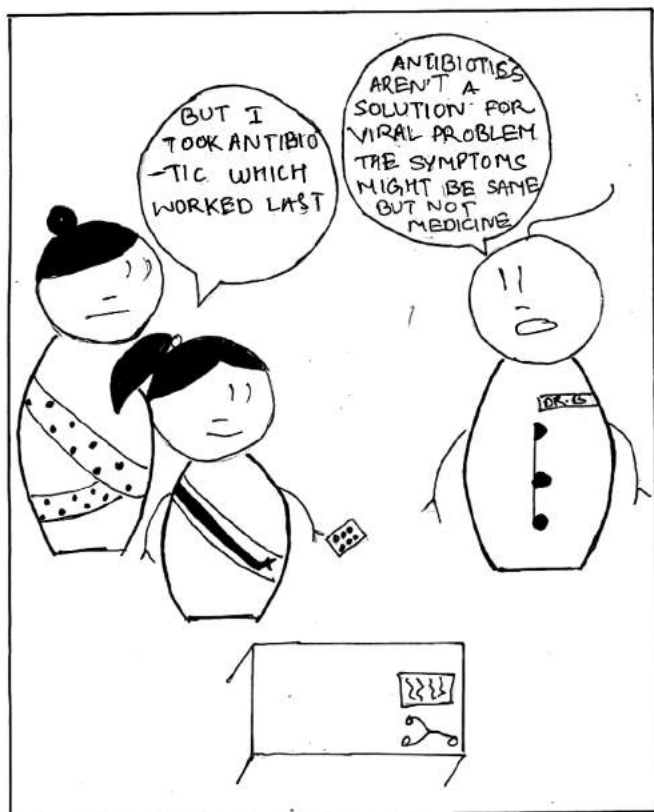
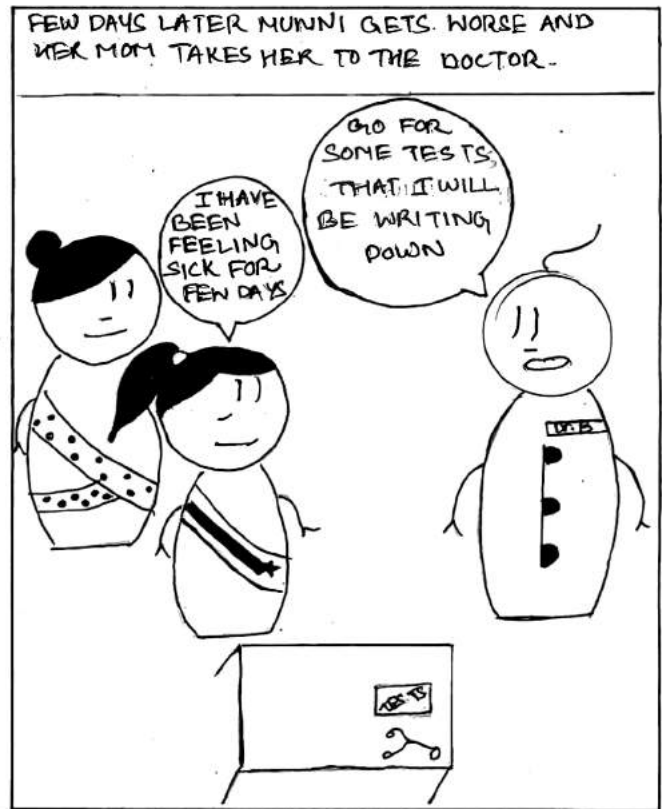


Listen  
to your  
doctor

Government of India's National Health Policy 2017 highlights the problem of antibiotic resistance and calls for a rapid standardization of guidelines regarding antibiotic use. It limits over-the-counter sale of antibiotics, bans or restricts the use of antibiotics as growth promoters in animal farming, and provides guidelines to monitor antibiotic usage in hospitals.

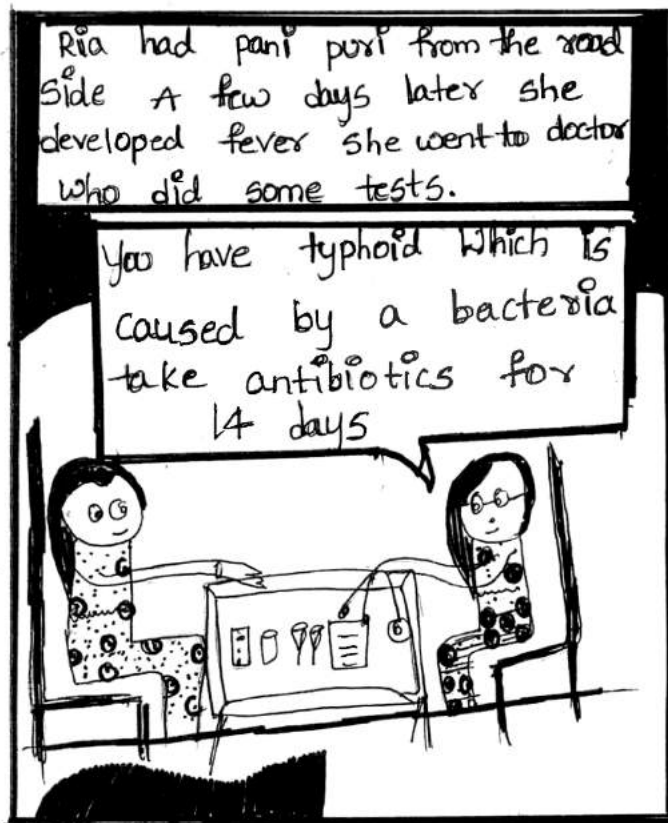


# MEDICINE OR MAD-SIN



-By Kornecha Saikia.

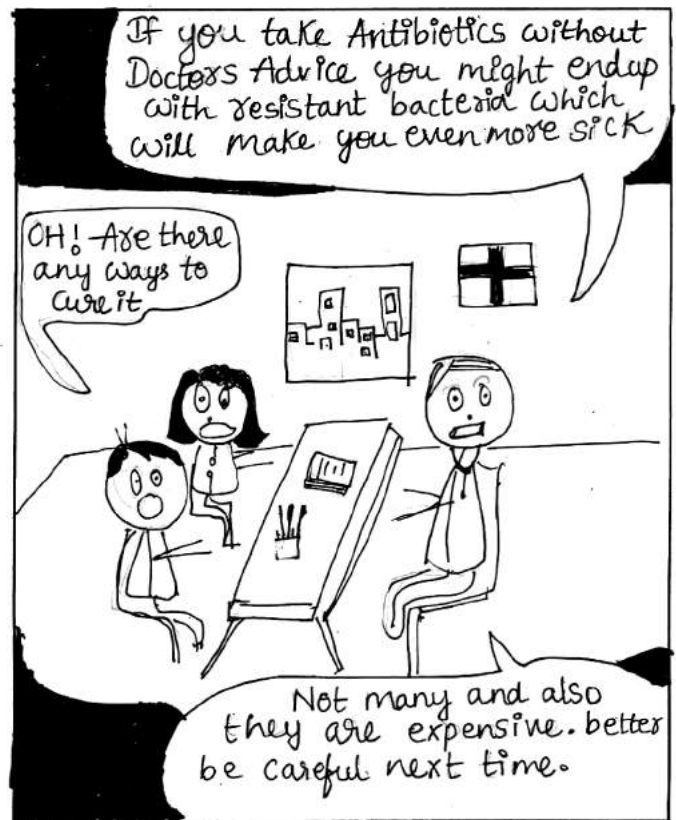
# FOLLOW THE DOCTOR ADVICE



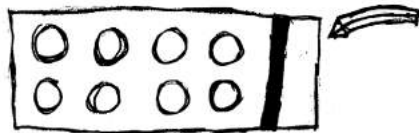
Y. Srivani



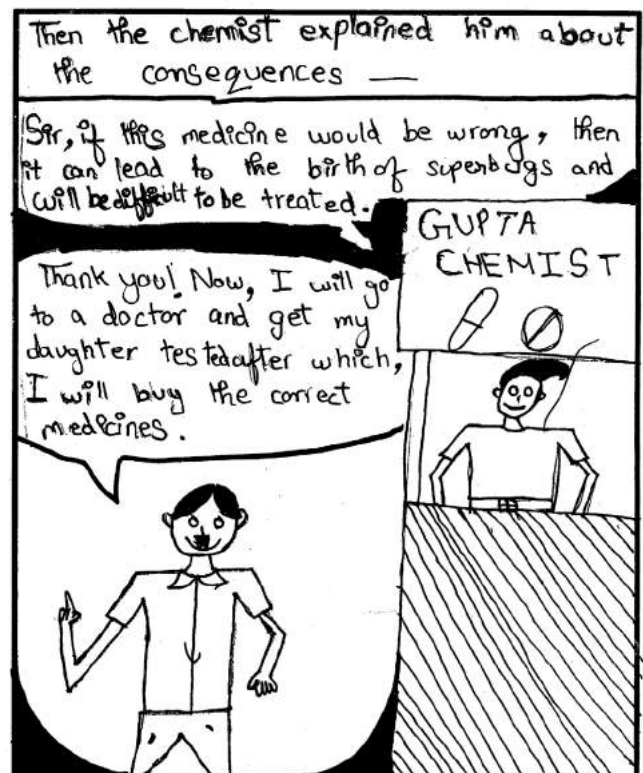
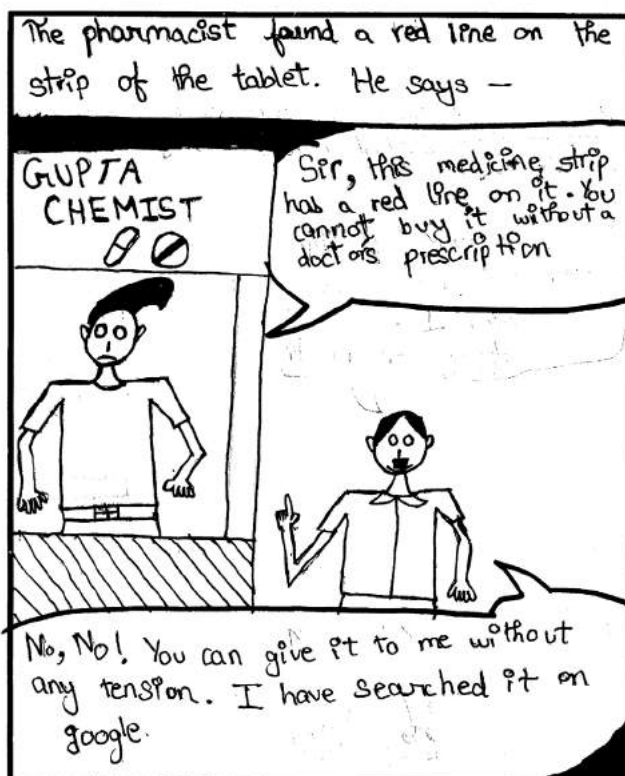
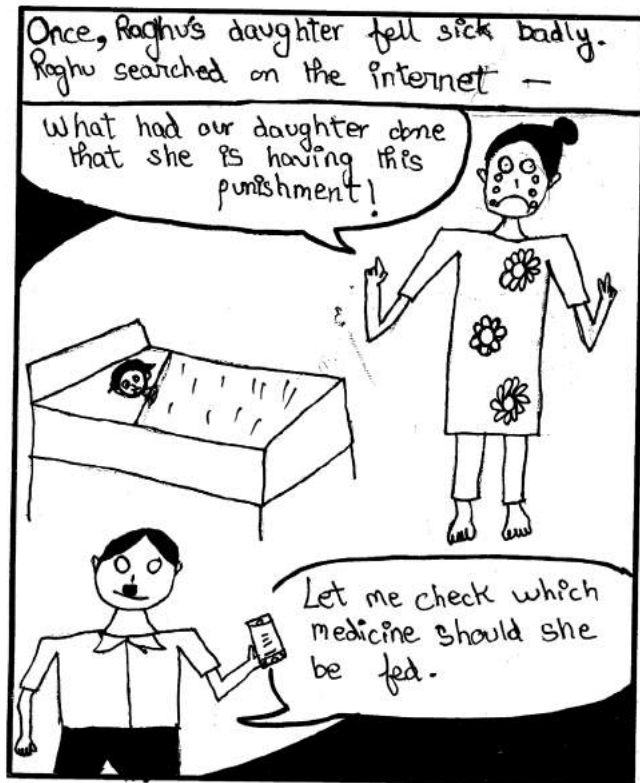
# Dr. Smart







# REDLINE



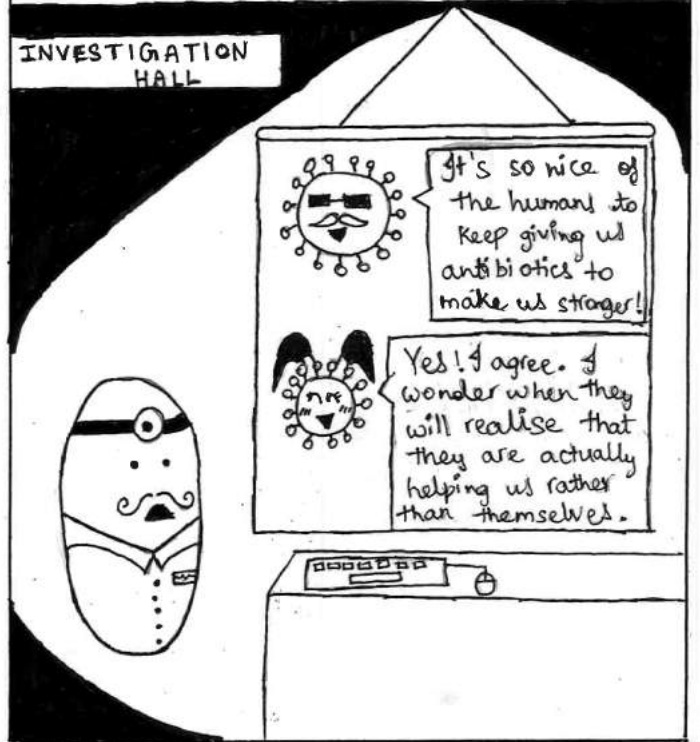
Karan

# ★ ★ NOW OR NEVER!

A day in Dr. Bacillus's clinic .....



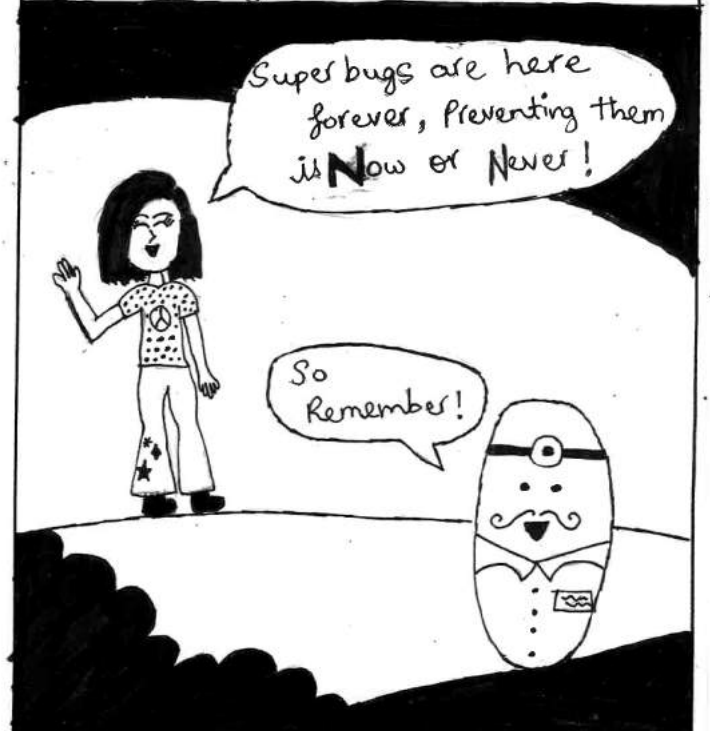
He shows the bacteria through a PPT .....



In the Result Room .....



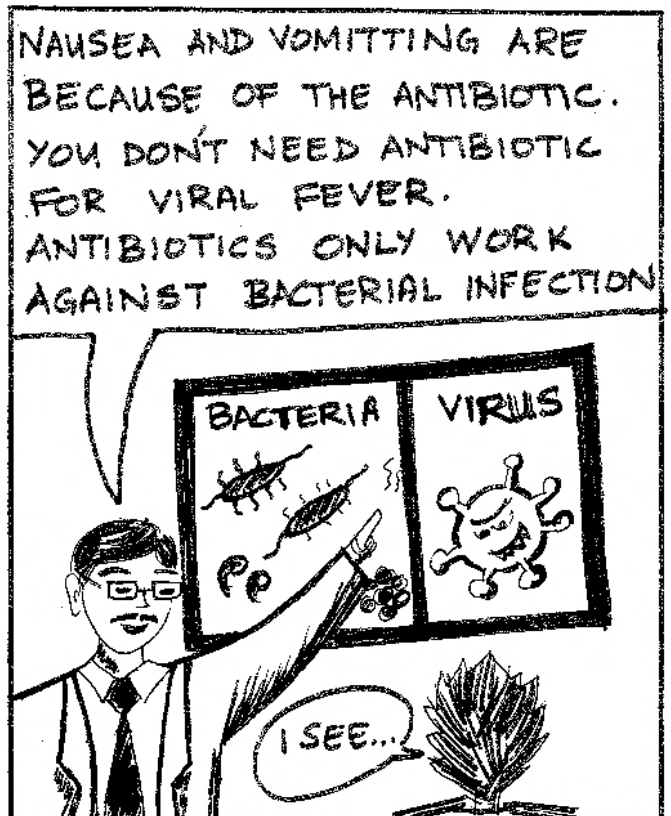
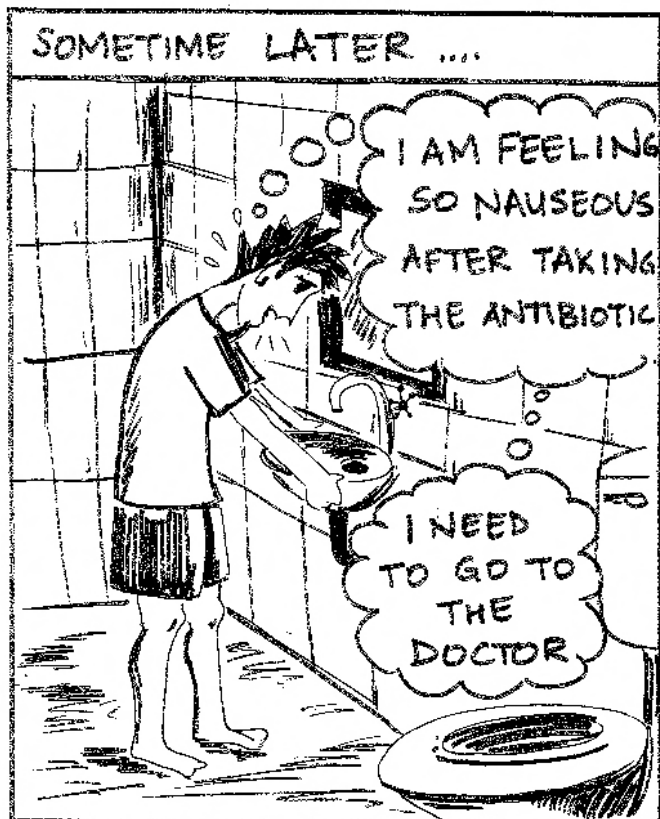
Finally .....



SRUTHI MANIKONDA



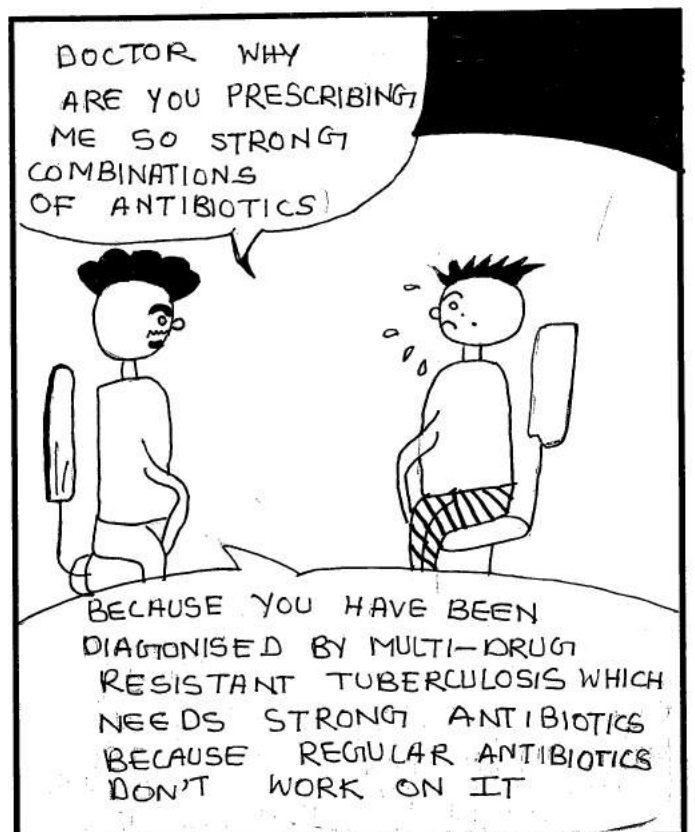
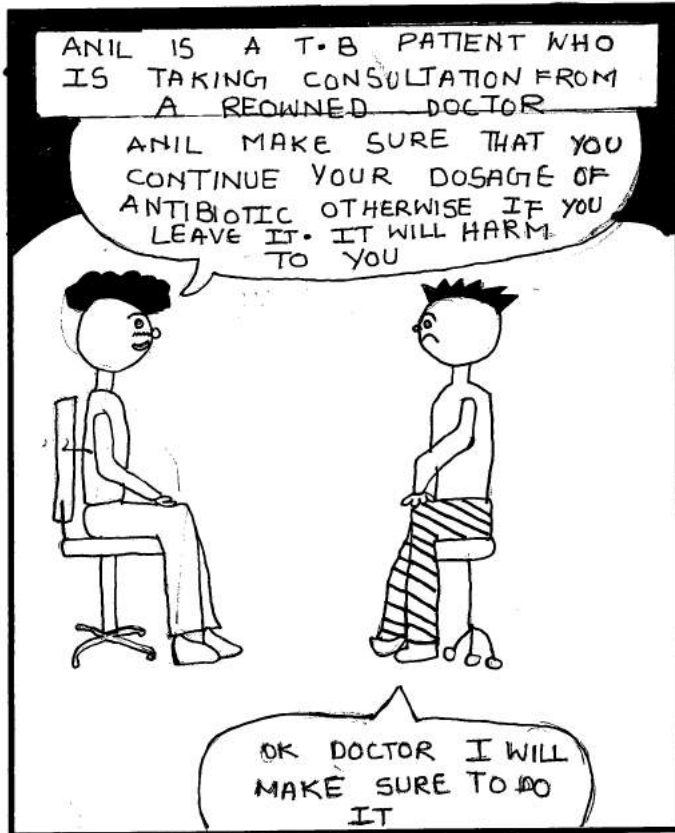
# know when to say **NO**



KADAMBARI • N



# OF COURSE, FULL COURSE



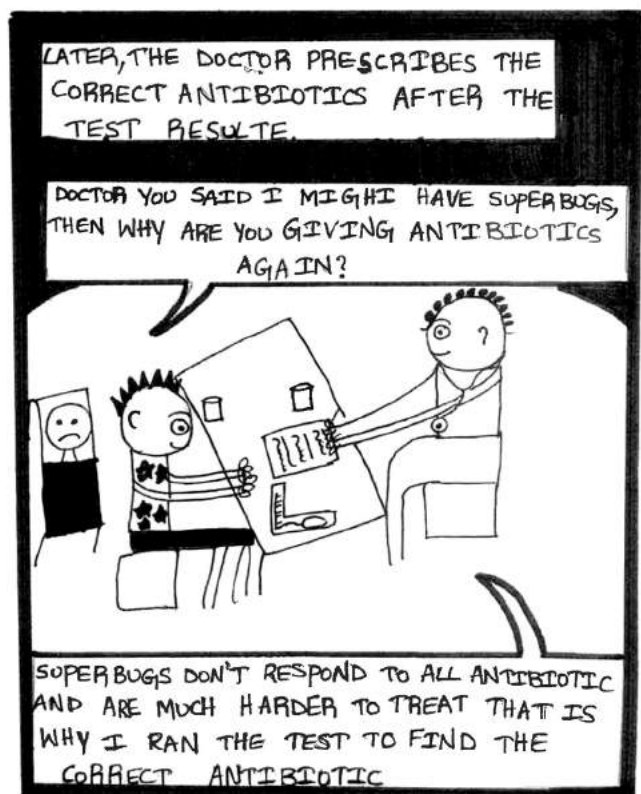
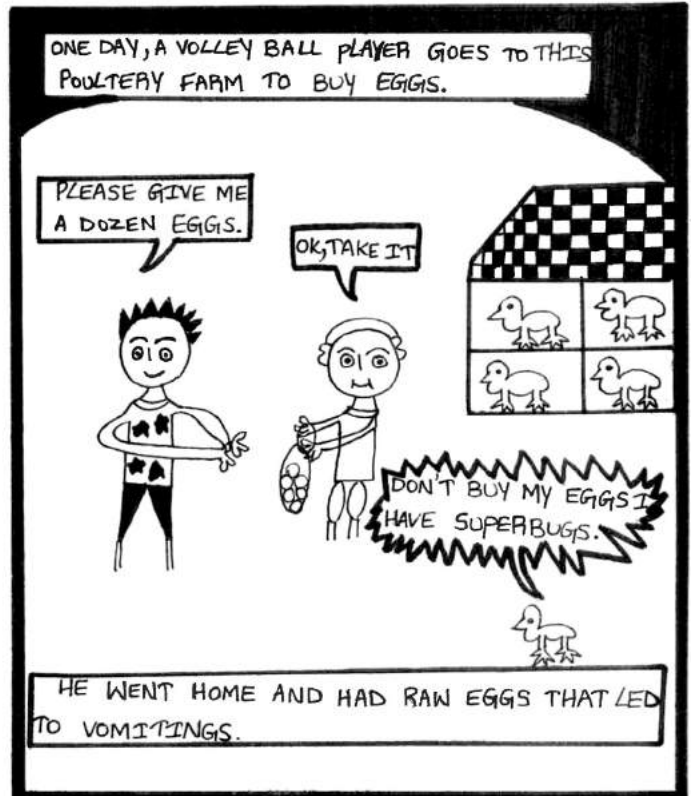
SAANVI JHA

While India is the largest consumer of antibiotics for human health in the previous decade, a recent study indicates that 64% of antibiotics sold in India are unapproved. Further, estimates indicate that 80% of global antibiotics are manufactured in India and China, the effluent from the pharmaceutical industry further adds to the problem. There have also been alarming reports of last-resort antibiotics like Colistin being used in the poultry industry in India. Antibiotics are finding their way into our environment which pose several risks including spread of antibiotic-resistant infections in human as well as in animals.

## Antibiotics in animals and environment



# CHICKEN & EGG PROBLEM



Done by:  
M. Shivani



# UNUSED MEDICINE



ANUSHA.M

# A NEW ENEMY FOR HUMANS

IN A VILLAGE THERE WAS A MAN WHO WAS BREEDING COWS. A VETERINARY DOCTOR GAVE THE MAN ANTIBIOTICS FOR HEALTHY COWS. AND MORE MILK



THE MAN MADE MORE MILK BUT SOME COWS WERE SICK BECAUSE OF SUPER BUGS.



I WILL DRINK AND I WILL SELL AND I WILL BECOME RICH



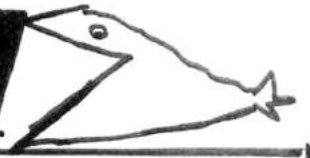
YOU USED A LOT OF ANTIBIOTICS. YOU ARE SICK. COWS ARE SICK. PEOPLE DRINKING YOUR MILK ARE SICK. YOU KILLED BOTH BAD & GOOD BACTERIA



P. M. N. K. 14/12



# IT'S FISHY



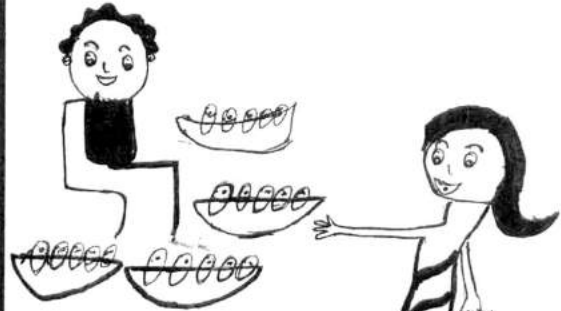
AT ONE ANTIBIOTIC  
FACTORY

WE HAVE SO MUCH OF  
WASTE AND ONLY WAY  
WE CAN GET RID OF  
THIS ANTIBIOTICS BY  
THROWING IT INTO RIVER



OH AGAIN ANTIBIOTICS  
FOR BREAKFAST..—

NEXT DAY A FISHERMAN CATCHES fish  
FROM THAT RIVER AND SELLS  
IN THE MARKET..—



WOW THEY LOOK  
SO FRESH GIVE ME  
2 KGS PLEASE!

NEXT DAY SARITHA falls sick and  
GOES TO DOCTOR...

OH SARITHA YOU ARE SICK AGAIN  
I MUST SEE FROM WHERE  
bought your fish you



THEY WENT TO THE FISH SHOP AREA

OH I CAN SEE YOU HAVE  
EATEN CONTAMINATED fish AND THAT WHY  
GOT INFECTION IS YOU

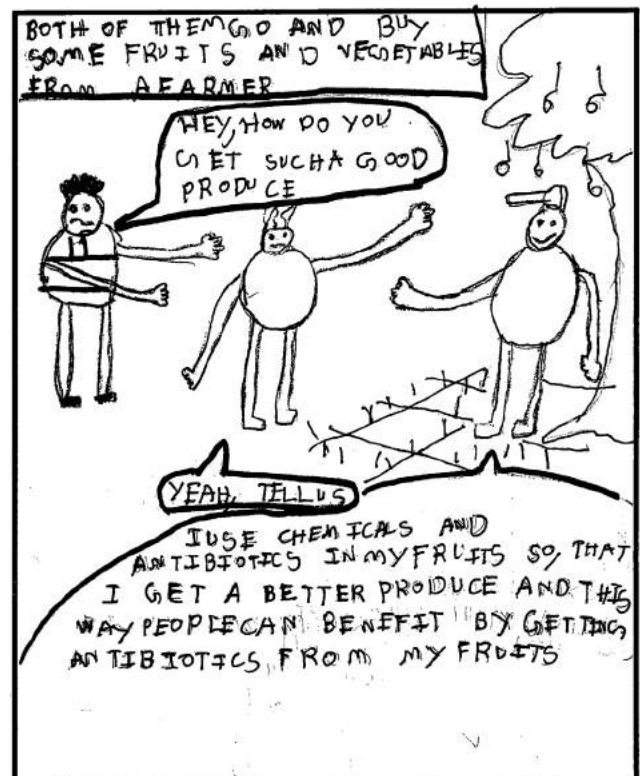


OH I MUST NOT EAT THIS FISH  
AGAIN!

D. NIKITHA



# VEG BACTERIA



-RUBAIR SIDHU

# HEALTHY NOT Fat

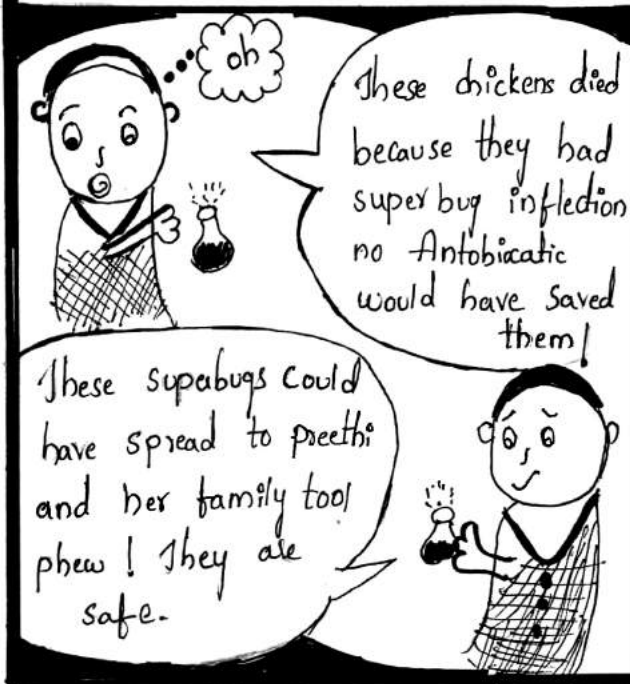
A poultry farmer in a village close to Hyderabad was raising chickens for a living



One day preethi came to the poultry farm...



She went to one laboratory to check the cause of their death



When the incident was reported to Animal husbandry department of the state Govt...



Done by  
K. Shrusha



# STOP DUMPING ANTIBIOTICS

IN ONE VILLAGE GOVERNMENT LAND WAS THERE BESIDES A CANAL THE FOREIGN COUNTRY PEOPLE TOLD A CONSTRUCT ANTIBIOTICS FACTORY IN THAT VILLAGE. THE OFFICERS STARTED DISCUSSION....

THIS PLACE IS ENOUGH TO CONSTRUCT THE FACTORY

OH, YES WE WILL START OUR CONSTRUCTION HERE



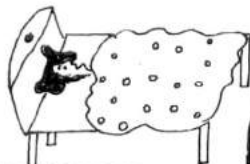
CONSTRUCTION WAS COMPLETED AFTER SOME DAYS THEY STARTED DUMPING CHEMICALS IN THE CANAL THE VILLAGE PEOPLE DID NOT KNOW THAT THEY ARE MIXING CHEMICALS



WOW! THIS WATER TASTES DIFFERENT



AFTER FEW DAYS MANY PEOPLE IN THE VILLAGE STARTED TO FALL SICK WITH SUPER BUG INFECTION



YES, WE WILL INFORM THE GOVERNMENT

THIS FACTORY IS DUMPING ANTIBIOTICS AND GIVING SUPERBUG INFECTION TO OUR PEOPLE



SIR, IN THAT CANAL BACTERIA CHANGED INTO SUPER BUGS AND NOW ANTIBIOTICS UNABLE TO CURE INFECTED PEOPLE

YES, I KNOW THAT YOU ARE SUFFERING FROM THIS PROBLEM WE WILL STOP DUMPING, UNTREATED WASTE



K. Bruthi 1x B/sec



Preventing infection can reduce the use of antibiotics and limit the spread of antibiotic resistance. Eating nutritious food to build immunity, taking flu shots at the outset of a flu season and good hygiene practices are some of the most easy and effective ways to reduce the risk of infection.

As they say,  
prevention is  
better than  
cure



# NEAT NUSKHA



RUCHI JAIN

# COSTLY CURE

FEVER IS A REALLY SIMPLE ISSUE THINKS THE GRANDPA

CHILD, CAN YOU HAND ME OVER THE ANTIBIOTICS DOCTOR GAVE ME LAST TIME.

GRANDPA, YOU SHOULD FIRST TAKE DOCTOR'S ADVICE.



AFTER 2 DAYS, GRANDPA FEELS BETTER

I TOLD YOU ANTIBIOTICS DO NO HARM TO US. I EVEN SAVED YOUR MONEY.



I HOPE THERE ARE NO SIDE EFFECTS.



GRANDPA ALWAYS BOASTS ABOUT HIMSELF AND HIS FITNESS.

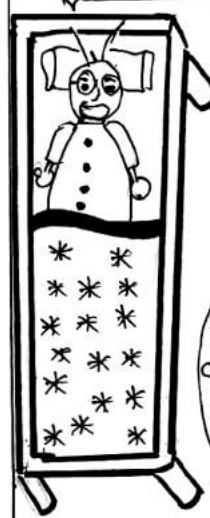
AFTER A WEEK

I AM FEELING UNWELL AND WEAK AGAIN. EVEN, MY DIGESTION IS NOT PROPER.

THESE ARE THE SIDE EFFECTS OF NOT FINISHING THE COURSE.



OH MY GOD! I HOPE I HAD SEEN A DOCTOR ON THE FIRST DAY ITSELF! NOW, CURING WILL TAKE LONG AND I HAVE TO EAT MORE ANTIBIOTICS.



I ALREADY WARNED YOU. THEY DESTROYED GOOD BACTERIA. SO, ALWAYS TAKE DOCTOR'S ADVICE



- RICHISHA GUPTA  
IX C

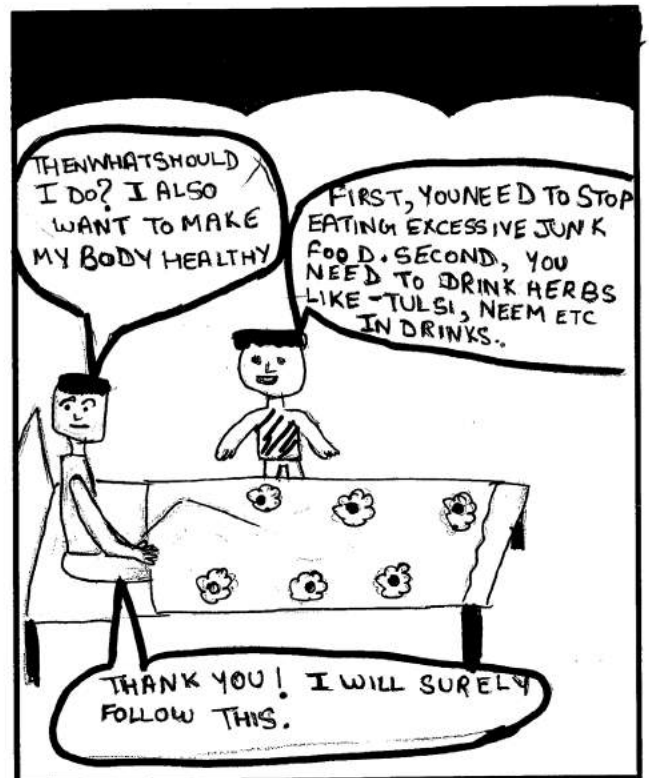


# HARD LESSON



Done by  
G. Preethi...

# JUNK THE JUNK FOOD

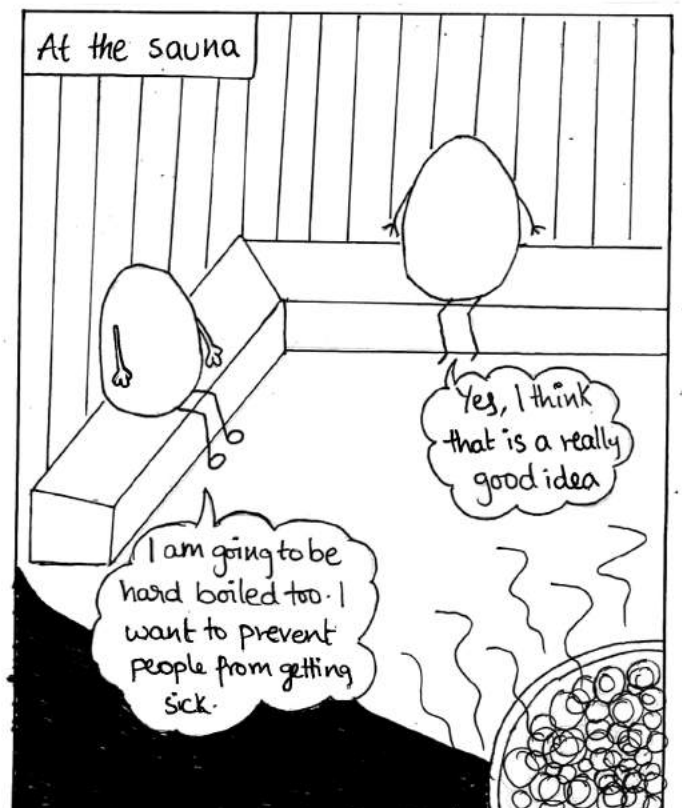
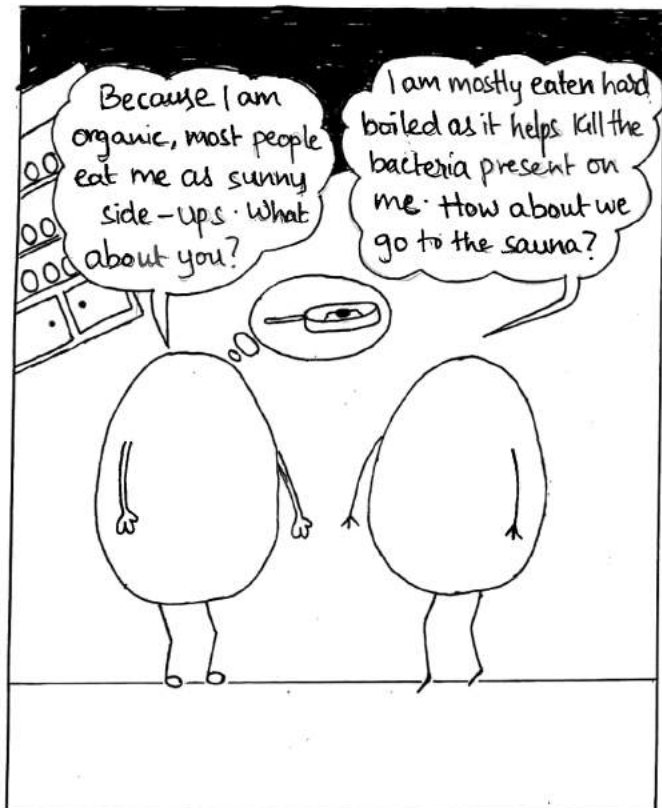
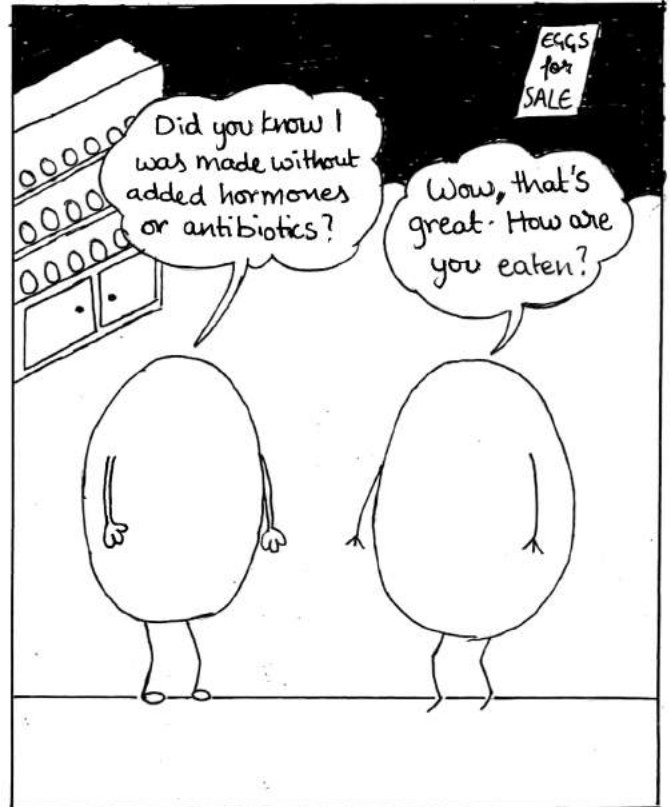
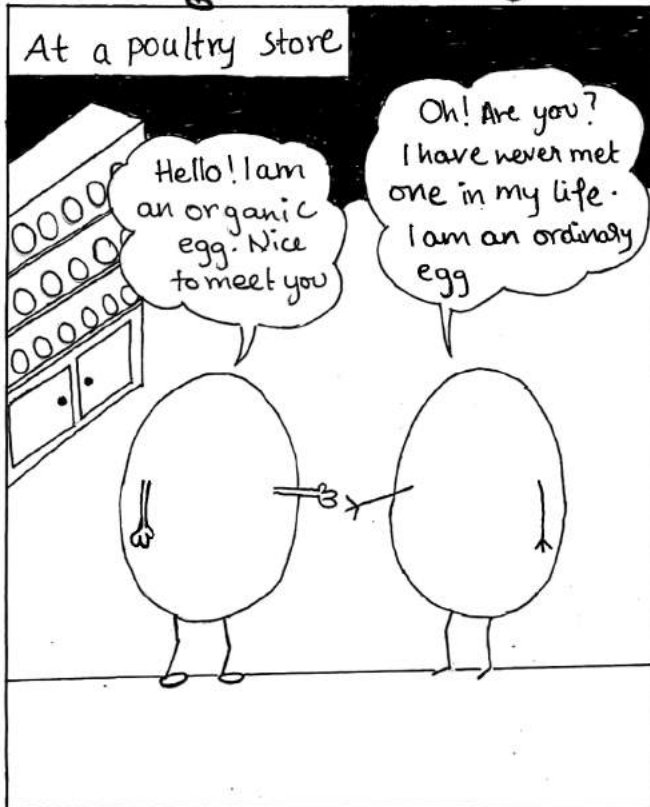


NAINA KAPOOR





# hard BOILED



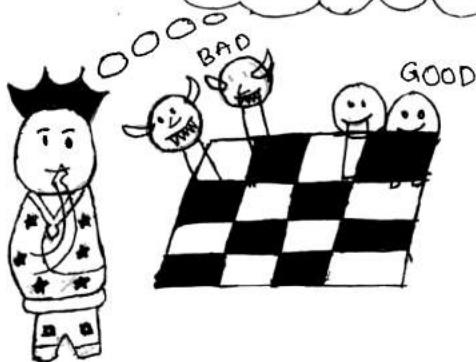
Suharika Mutyarn



# WISE SOLUTION

In the kingdom called Stomach, ruled by King Bacteria lived good & bad bacteria.

The good and bad bacteria are always fighting. The bad bacteria are causing many illness.

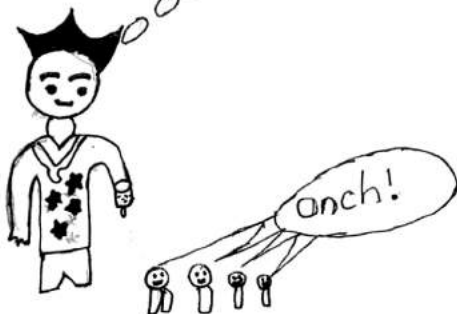


I must punish the bad bacteria. I will do so by using antibiotics

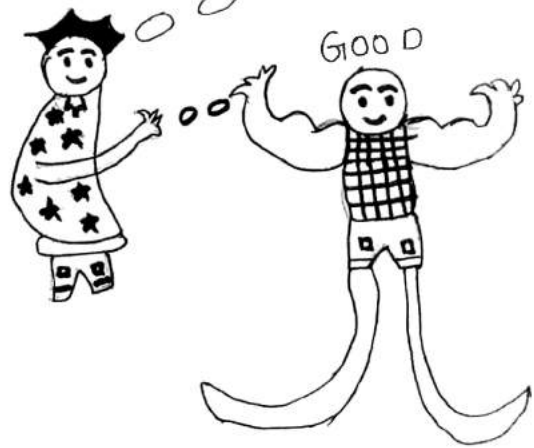


AFTER few days

But the antibiotics are also punishing the Good bacteria! I have to protect my good bacteria.



I will protect my good bacteria using PROBIOTICS while antibiotics continue to punish bad bacteria



N. Maheshwari

# CLEAN = HEALTH = HAPPY

DOCTOR VARUN GOES TO HIS UNCLE'S VILLAGE

Uncle, your village is very dirty, people are throwing garbage on the road, there is no sanitation and proper toilets.

What to do Varun? I am the president of the village but we have so much work how much can I do?



Uncle if your village is dirty people will fall sick. There will be bacterial many infections will spread through dirty water and air.

Oh, no, if people in my village fall sick, they will not be able to work make a living.



Also, did you know that an infections caused by super bugs. These bugs that cannot be treated by normal antibiotics please clean up your village.

I will explain to villagers and we will clean up our neighborhood.



NEXT DAY, THE VILLAGERS GET TOGETHER

Now we understand the value of cleanliness. Thank you Doctor Varun. Now we are going to have a healthy future.



Name: A. Hindhumathi.



## Superheroes against Superbugs are here!

Faced with a crisis on a global scale, people are responding with innovative solutions, giving us hope that we can overcome one of the greatest medical and public health challenge of our times. By looking again at how bacteria behave in the microscopic world, researchers are making remarkable discoveries that could lead to radical new treatments. Common people are raising awareness on this issue and are advocating for responsible use of antibiotics. There is an urgent need for each of us to become 'superheroes' in this crusade against superbugs for a healthier future.

. It's not all  
gloom and  
doom

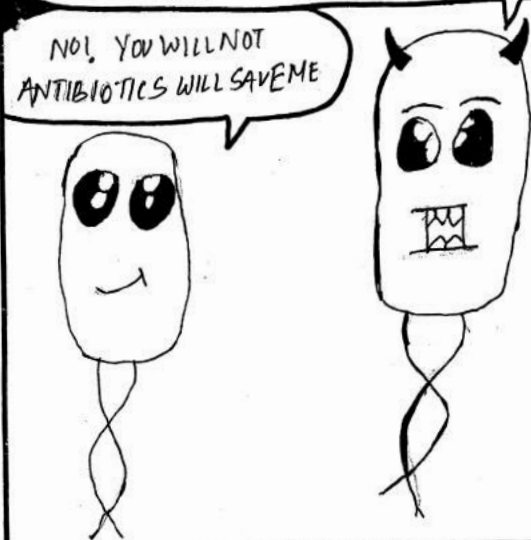


# THE VIRAL SAVIOUR

ARCHIE, JUGHEAD CAME OUT OF SAME COLLEGE OF BACTERIA BUT ARCHIE BECAME A BAD BACTERIA.

I WILL NOW INFECT THE BODY YOU ARE LIVING IN!!

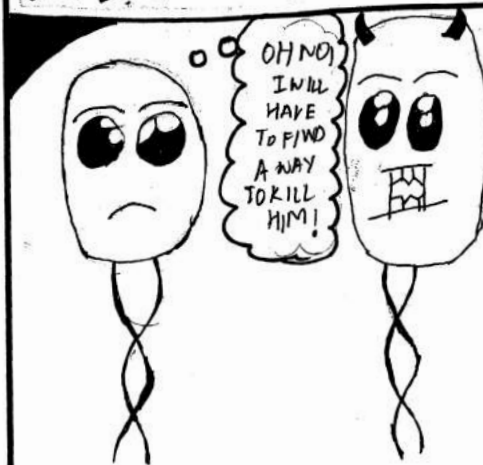
NO! YOU WILL NOT ANTIBIOTICS WILL SAVE ME



BUT, TOO MUCH OF ANTIBIOTICS MADE ARCHIE RESISTANT TO ANTIBIOTICS.

HA HA! YOUR MEDICINE WILL NOT WORK ON ME! I HAVE BECOME RESISTANT!

OH NO! I WILL HAVE TO FIND A WAY TO KILL HIM!



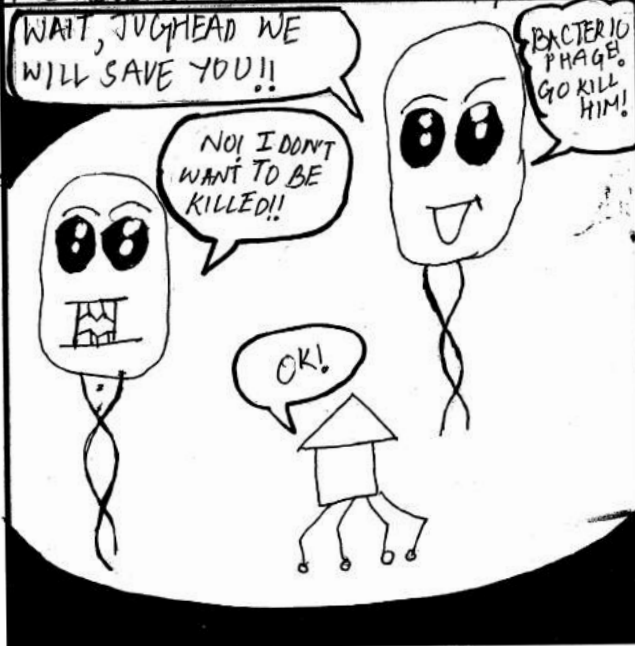
ARCHIE WAS ABOUT TO INFECT JUGHEAD WHEN BETTY CAME TO THE RESCUE WITH BACTERIOPHAGE

WAIT, JUGHEAD WE WILL SAVE YOU!!

NO! I DON'T WANT TO BE KILLED!!

BACTERIOPHAGE GO KILL HIM!

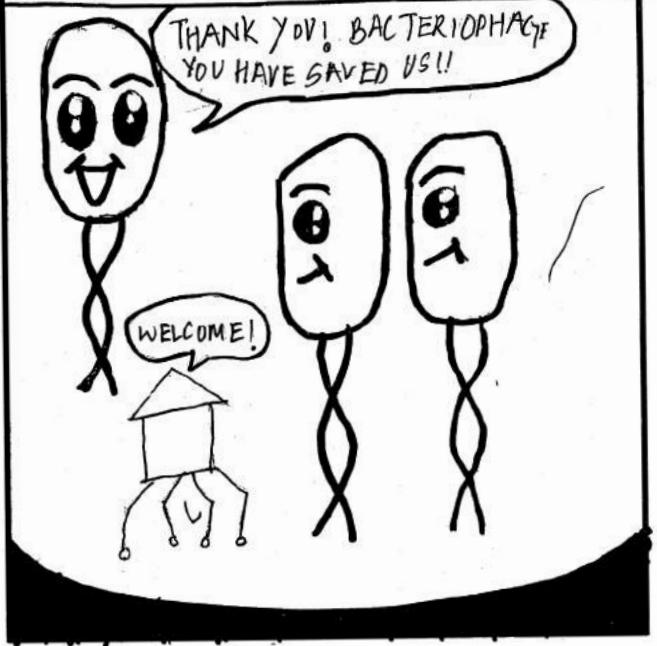
OK!



BACTERIOPHAGE KILLED THE BAD BACTERIA AND AFTERWARDS ALL THE BAD BACTERIA DIED

THANK YOU! BACTERIOPHAGE YOU HAVE SAVED US!!

WELCOME!



SARTHAK DEVLAL



# P vs PHARMACY

DURING A FOREIGN TOUR MR. NANDO  
FELL SICK AND WENT TO A PHARMACY.

SIR, CAN YOU GIVE ME  
XXX ANTIBIOTIC  
IT'S AN EMERGENCY

NO, SIR. YOU  
CAN'T TAKE  
MEDICINES WITH-  
OUT PRESCRIP-  
TION

PHARMACY

LATER IN INDIA.

Do PHARMACIES IN INDIA  
GIVE MEDICINES WITH OUT  
ANY PRESCRIPTION LET'S SEE

NEXT DAY MODIJI WENT TO A PHARMACY. HE  
HAD DRESSED HIMSELF AS A VILLAGER

SIR, I AM  
SUFFERING FROM  
STOMACH ACHE

TAKE THESE "ANTI-  
BIOTICS" FOR 3  
DAYS. IT WILL BE  
FINE

PLEASE  
GIVE  
ME  
MEDI-  
CINE

PHARMACY

LATER IN HIS OFFICE...

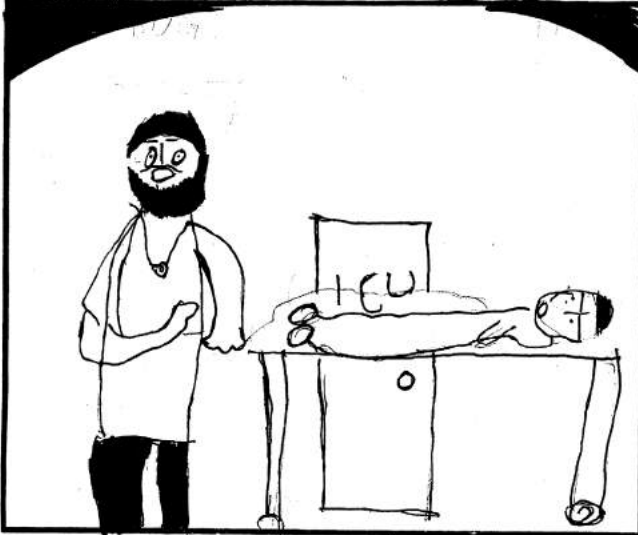
BREAKING NEWS

BHAIYO AUR BEHNO, AS  
THE PHARMACIES AREN'T  
FOLLOWING MY RULES, THE  
GOVERNMENT IS  
INTRODUCING A GADGET  
WHICH WILL SCAN PRESCRIP-  
TION AND DELIVER MEDICINE

C. Shrivya  
IIB

# KOMODO DRAGON'S BLOOD

A PATIENT DIED BECAUSE OF  
SUPERBUGS



OH, KOMODO DRAGON'S  
BLOOD HAS ANT-BACTERIAL  
PROPERTIES. I MUST GET  
BLOOD SAMPLES

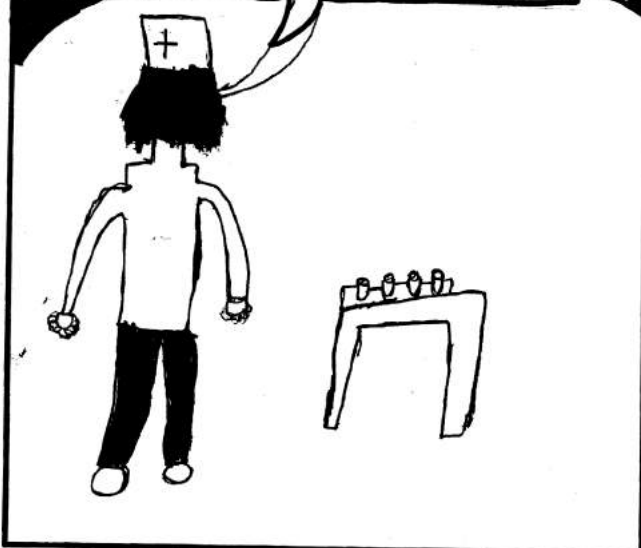


HAHA!  
THAT'S NOT  
POSSIBLE



AT LAB

EUREKA! THE CHEMICALS FROM THE BLOOD  
CAN KILL SUPERBUGS! THIS WILL BE A  
GOOD ALTERNATIVE TO ANTIBIOTICS



IN PRESS CONFERENCE

CURE  
OF SUPERBUGS



ANTIBIOTIC

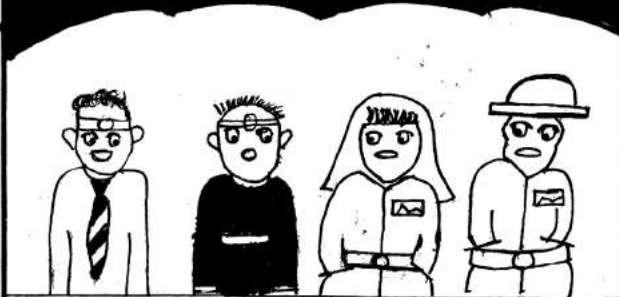


-PARTH MALIK



# PREVENTION BY INVENTION

A team of doctors and researchers met at the lab for discussing the diseases caused by bacteria. Rita, Jayanta, Devi and Mahesh met there.

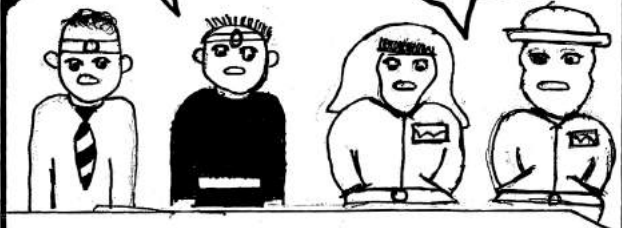


The treatment itself is not sufficient.

Yes it get transferred through walls.

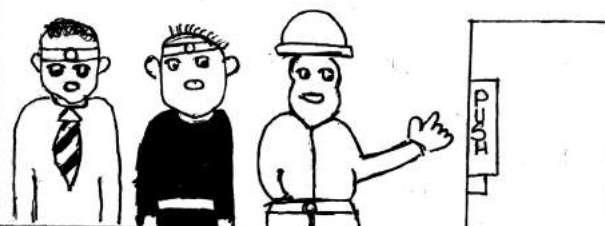
It also get transfer through doors handles and even from the stethoscope.

We will research on this to find its solution.



By saying this Rita and Jayanta left the lab and start to work in Jawahar Lal Nehru center for advance scientific research Bengaluru.

After a few months Mr. Jayanta came with his innovation.



Look at this push door handle it has sanitizer in it

Look we have made the polymeric paint for the walls

But what about the stethoscope?

Here it is.



Pari Singla

# COPPER KILLER

हाथ पर बैठे कीटाणु

वाह भाई लोग इस आदमी का  
तो हमने काम तमाम कर दिया।

हाँ इसने दोस्त से हाथ मिलाया  
तो हम सब उसके हाथ से इसके हाथ  
पर कूद गया।

चलो अब और कीड़े  
शिकार दूँगे हैं

हाँ अब यह जहाँ जहाँ भी हाथ  
रखेगा हम एक एक करके  
वहाँ पर कूद जाएंगे ॥

और अगले शिकार के वहाँ  
हाथ रखने का इंतजार करेंगे।

देख वह नलके पर हाथ रख रहा है।  
कूद जा ४४४!!!

हाँ कूदता हूँ। अब भजा जाएगा।  
बा ४४४ य ४४४ दोस्तों ॥

अरे मर गया...!!! ये कहाँ कूद  
गया...!!! ये तो COPPER का नलका  
है। ये तो कीटाणुओं को मार  
डालता है।

.. बचाओ ... बचाओ ..

MADHAV  
RUDRAKSH



# FLUORESCENT

# BANDAGE



VEDI JAIN

# ..Superheroes Against Superbugs..



...K. Ganga... IX'A/S  
...T.S.W.R COE Gowlidoddi...





# Superheroes



**IndiaAlliance**  
DBT wellcome



World Comics India