

From “Anti-inflammatory Medicine” to Public Resource: Antibiotic Culture, Intergenerational Memory, and the Ethics of AMR Governance in China

Jingyi Yang

Harrow International School Beijing, Hegezhuang village No.287, Cuigezhuang County, Chaoyang District, Beijing 100102, China

* Corresponding Author Email: isabellayang_2008@outlook.com

Abstract. The abuse of antibiotics in China cannot be considered solely a consequence of the scientific illiteracy of the population. On the contrary, one needs to look at this phenomenon in the context of historically developed “antibiotic culture” which can be seen through history. From penicillin as a symbol of modern medicine and national salvation to the role of barefoot doctors and primary health care in the distribution of antibiotics in rural China to the liberalization of health care following Reform and Opening-up, antibiotics have increasingly become for many people “effective anti-inflammatory medicines.” Due to the cultural memory, different generations perceive disease, infection, doctors, and pharmacies differently. However, in the wake of the growing antimicrobial resistance crisis that poses a threat to the public health globally, antibiotics have been re-conceptualized as resources requiring collective effort in its preservation. This creates ethical dilemmas both in terms of misuse reduction and providing access to reliable and affordable treatment for those who still need antibiotics. The essay will discuss possible solutions to these dilemmas.

Keywords: Antibiotic culture, AMR governance, bioethics, intergenerational memory, China.

1. Introduction

Why is it in China that antibiotics have tended to be thought of as “anti-inflammatory medicines” or strong medicines? The question here does not merely indicate a gap in the scientific literacy of the general public but rather raises the more complicated question of what kind of historical and sociocultural process has resulted in the construction of meanings of antibiotics that transcend their biomedical categorization as medicines used for treating bacterial infections.

This is evident in the way Chinese families use health care services on a daily basis. Amoxicillin, cephalosporin, and azithromycin are examples of antibiotics that are considered “anti-inflammatory medicines” rather than “antibiotics.” This is due to the fact that azithromycin has been included in the definitions of fever, sore throat, infections, pneumonia, and body inflammation. Surveillance data show that antibiotic consumption in China remains high compared to many other countries, with significant use of broad-spectrum agents in primary care [1, 3].

This question will guide the exploration of the development of antibiotic culture in China and the way in which various generations have understood antibiotics. Moreover, the project will also look at the way in which such cultural understanding of antibiotics leads to their misuse and how antimicrobial resistance makes this an issue of ethics. Antibiotics are not simply individual medicines meant for treating individuals; rather, they are public goods that have to be preserved for the future generation of patients.

The development of antibiotic culture in China and its ethical implications will be investigated via secondary sources, medical history of China, and mini oral interviews through an anthropological and bioethical approach.

1.1. Penicillin as a Symbol of Modern Medicine

The history of antibiotic culture formation in China lies in the history of penicillin. Penicillin when it came into China, did not only represent a drug. Instead, it represented modern science, salvation in time of war, and the promise of “miracle medicine.” Therefore, it was not the biomedical effectiveness

alone, but also social and political, which contributed to the worthiness of penicillin. During times of war, illness, scarcity, and reconstruction, penicillin would treat infectious diseases, which were otherwise fatal or incurable. Thus, antibiotics were established in their cultural power from the very beginning, which created an expectation of them as being highly effective, rapid, and reliable medicines, instead of just drugs for bacteria.

1.2. Barefoot Doctors and the Entry of Antibiotics into Rural China

Barefoot doctors served as a key factor in bringing modern medicine, especially antibiotics, to rural China. They increased access to medicine and offered stable health care services to many villages. As barefoot doctors were trained for shorter periods and had very few resources, the process of diagnosing a patient was only based on observable symptoms. Hence, antibiotics at that time had become a common symptom-based treatment.

This can be proven by the observations made by Chen Fujun, as discussed in the article "Antibiotic Culture" by Zhou. He states that some barefoot doctors "randomly prescribed antibiotics to any villager who had a fever since they did not know the cause and were not trained to diagnose" [16, p. 5]. According to Zhou, this was a "de-medicalization" of antibiotics, which means that antibiotics got separated from Western ideas of diseases and causes of diseases and got integrated into the local practice.

This process helps explain how antibiotics became localised into Chinese illness language. Fever, inflammation, cough, pain, or visible swelling could all be grouped into a broad category requiring anti-inflammation.

1.3. Medical Marketisation, Pharmacies, and Self-medication

With the discontinuation of the Rural Cooperative Medical Service in 1983, a lot of barefoot doctors became private village doctors and opened their clinics. The rural doctors were now forced to earn money, retain the confidence of the patients and compete in the new market-based healthcare environment. In Zhou's article on "Antibiotic Culture", he asserts that rural healthcare moved into a "drug-centred system" which often used the prescription of antibiotics [16, p. 7].

Marketization transformed the sociological meaning of antibiotics. In the former era, antibiotics represented state salvation, rural medical accessibility, and the prospect of modern medicine. Yet in the post-R&O era, they increasingly came to signify commodities that flow among village clinics, pharmacies, hospitals, and family first-aid kits. Prescribing antibiotics for doctors meant appeasing the patients as well as providing good treatment. From the patient's side, antibiotics represented personal salvation.

Pharmacies and self-medication further reinforced this culture. Even though restrictions to prevent pharmacies from selling antibiotics without prescriptions were introduced by China in 2012, Zhou's article notes that many patients could still buy antibiotics "without a prescription" [16, p. 8]. The gap between official regulations and everyday practice allowed families to buy, store, and use antibiotics in their will. Therefore, after this period of time, antibiotic culture was mainly caused by market incentives, uneven regulation, pharmacy accessibility, and the need for affordable self-treatment.

2. The Epistemology of Antibiotics Across Three Generations

Antibiotic culture has not just had an impact on the way antibiotics are used, but also on the understanding of antibiotics by various generations. In order to examine this process of transmission of meanings, this section will look at three generations, starting with the older generation, represented by my grandmother, who was witness to both barefoot doctor culture and medicine, then going into the middle generation, made up of healthcare professionals, and finally, the younger generation of students. Through these three perspectives, this section looks at the way antibiotics are perceived to be powerful medicines, as well as what is considered a need for using antibiotics and what the changes in trust are.

2.1. Antibiotics as “Powerful Medicine”

Throughout the three generations, antibiotics have always been perceived as powerful medications from different perspectives. As my grandmother noted, there were limited medicines at her times of being a barefoot doctor and antibiotics like penicillin and streptomycin were used only in case of severe illness because they were life-saving medicines. They served as one of the best treatments then. The interviewed doctor has lots of patients who are sure that antibiotics can cure all kinds of diseases. A great number of patients believe that more costly antibiotics are better, which is consistent with findings from other studies on patient preferences in rural China [18], proving the fact that the cultural perception of antibiotics as powerful medicines has penetrated into society’s consciousness. In the younger generation, the idea of antibiotics is being perceived as a special kind of medicines. As for the interviewed student, he could differentiate antibiotics from other anti-inflammatory medicines and knew that they need dosage control. Nevertheless, his perception was not complete because he did not understand how antibiotics work, why dosage control is needed for them and when antibiotics are needed by a person. Thus, although the cultural meaning of antibiotics has changed in generations, the perception of antibiotics as powerful medicines stayed the same.

2.2. Use of Antibiotics

When it came to antibiotics in the times of my grandmother, the choice to administer them depended entirely on healthcare practitioners. As a barefoot doctor in her village, my grandmother was one of those few people with medical knowledge. Villagers lacked formal education and did not have much time for anything else other than work, thus depending on her decision making. In addition, the supply of antibiotics was limited and administered according to the number of people in the village by the county hospital. Consequently, my grandmother had to choose who would receive antibiotics.

The interviewed doctor explained how things have changed nowadays. It has become easier to gain access to medical information, but sometimes patients come with their own expectations. Some of them ask for antibiotics because they fear their illness might become worse, while others just remember that they had antibiotics earlier and they helped. It means that a doctor should make a decision if there is a need for antibiotics and inform a patient about it. This dynamic is also shaped by market incentives, where doctors in township hospitals may feel pressured to meet patient demands [5].

Despite being younger, this patient considered doctors to be the most reliable source of information. However, he stated that he was not going to consider their decisions without a proper explanation. The patient said that he would agree not to take antibiotics if the doctor explains to him why they were unnecessary. Thus, younger patients tend to trust medical professionals, but the trust is based on the understanding of the reasons for a particular decision.

In this regard, the role of the doctor among these three generations has changed. Unlike my grandmother’s patients, who relied on the judgement of the medical worker, younger patients are ready to be involved in the discussion regarding their treatment. It means that nowadays, in order to avoid unnecessary antibiotics, doctors need not only professional knowledge but also good explanations.

2.3. From Insufficient Access to Overuse

Based on the interview, it is possible to trace the history of the emergence of the problem associated with the use of antibiotics. While for the previous generation, the problem was not associated with abuse of the antibiotic; instead, it was caused by lack of access to antibiotics. According to my grandmother's generation, antibiotics were supplied to villages in accordance with the number of people living there from the county hospital. There was always a shortage of penicillin which was used only in emergency cases. It led to lack of development of resistance due to the strict control over the use of antibiotics. Instead, greater availability intensified overuse, self-medication, and patient expectations for faster treatment. The interviewed student has realised that digital media today have taught younger generations antibiotics are powerful medicines. However, he recognised

that he had not been explained the fundamentals of when antibiotics are needed, why they do not treat viral infections, or why broader antibiotics are not necessarily better. Different generations understand issues regarding antibiotic use differently, which means methods to control antibiotics also need to adapt for the most important problem at that time to be addressed.

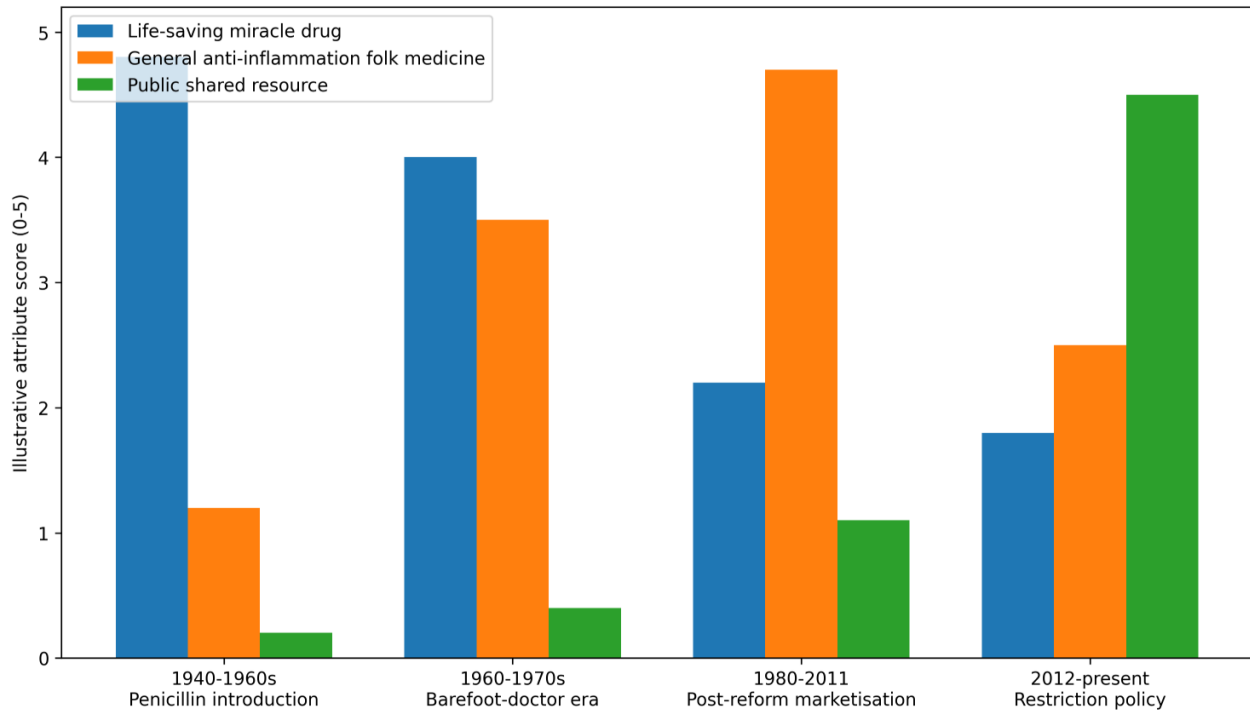


Figure 1. Shifting social roles of antibiotics across four historical periods in China

3. Tragedy of the Commons

3.1. Antibiotics as a Public Resource

As antibiotic resistance surfaces, ethical dilemmas arise simultaneously as antibiotics exist between two competing identities. On one hand, they are medicines used to benefit individual patients. On the other hand, they are also public resources whose use contribute to its effectiveness in the future, thus to future generations. For individual patients, antibiotic treatment can be something as simple as a mitigated fever or mental reassurance. But the sense of satisfaction will contribute to the selective pressure for bacteria, causing higher resistance among bacteria. Hence, the use of antibiotics is an issue of compromising between one's selfishness and social obligation, resulting in the "tragedy of the commons" [17].

The cultural significance of treatment in Chinese society makes this ethical issue even more complicated. This is shown in the case of over-prescription of injections and infusions in Guizhou. Over-prescription of injections and infusions is not simply a means of treatment; it is an act of caring that has its own cultural context and market situation. At some time, some patients have the perception that injections and infusions are much more powerful than oral drugs.

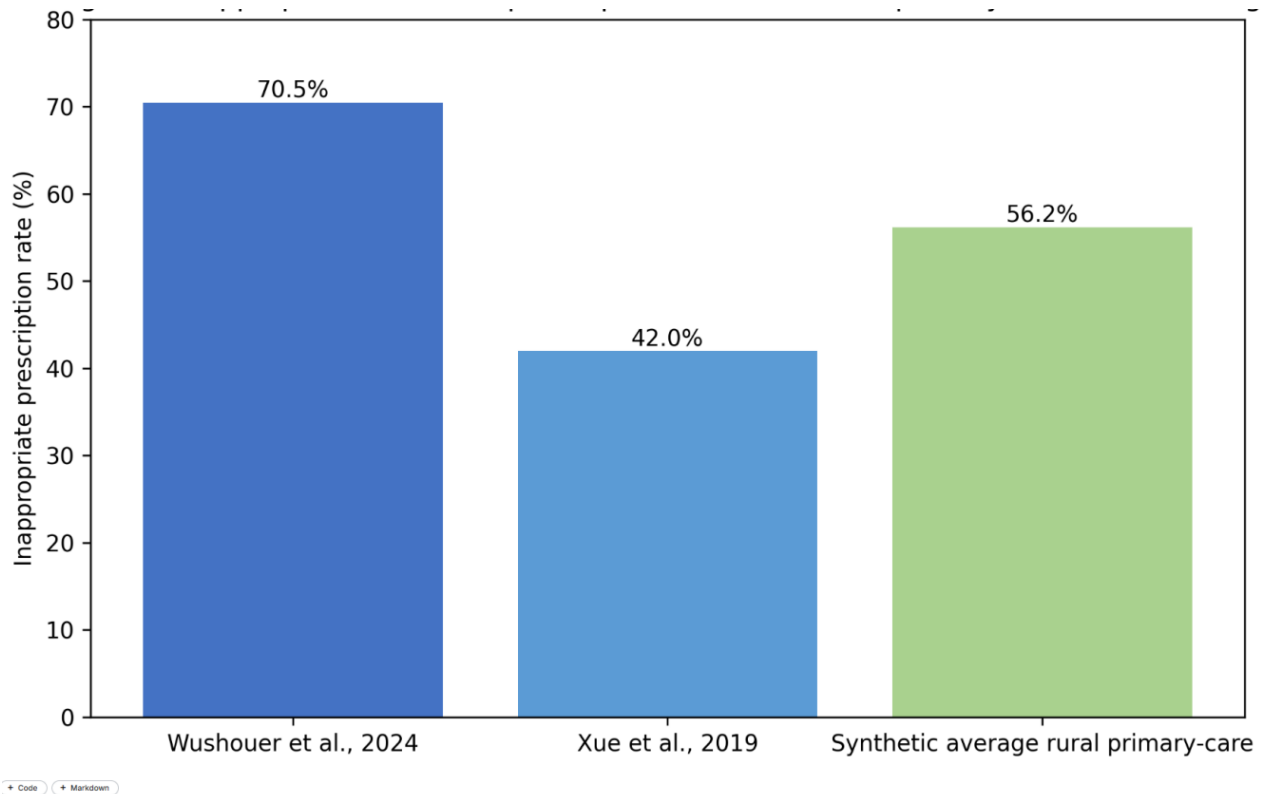


Figure 2. Inappropriate antibiotic prescription rate in Chinese primary-healthcare settings

The issue of unnecessary prescribing of antibiotics is still a big problem in the primary healthcare system of China too. The research studied the prevalence of inappropriate antibiotic prescriptions in 269 primary healthcare institutions in China, and found out that 70.5% of the antibiotics prescribed were inappropriate. In order to provide evidence for this research, Xue et al. carried out a study regarding the antibiotic prescribing in rural primary care practices of China, through the use of unannounced standardized patients. Of 526 visits made, 221 visits (42%) of antibiotics were prescribed without any need [14].

Therefore, the problem of antibiotic resistance is an issue which cannot be viewed simply from the point of view of people being educated regarding the mismanagement of antibiotics. Prescription of antibiotics is a matter of culture, access, incentives, and structure. Since the consumption of antibiotics affects not just the current patient being treated, but also the future patients who would require an effective drug, it becomes an ethical obligation of society as a whole.

3.2. Effective Antibiotic Use

As long as antibiotics are prescribed appropriately, its clear benefits will outweigh antimicrobial resistance. Correct use includes confirmed or strongly suspected bacterial infections, such as bacterial pneumonia, severe infections with risk of deterioration, and specific preventive situations such as surgical prophylaxis. In these cases, antibiotics are necessary and must be used.

In contrast, unnecessary antibiotic use occurs when there is no evidence of bacterial infection or when the risks outweigh the benefits. Common examples include viral illnesses, mild sore throats without bacterial confirmation, and taking antibiotics just in case. Responsible antibiotic use also involves choosing the appropriate type of antibiotic as misuse can also cause disruption to the normal microbiota. Broad-spectrum antibiotics can be valuable when the pathogen is unknown or the infection is severe, but unnecessary use creates greater selective pressure by affecting a wider range of bacteria. Narrow-spectrum antibiotics are preferred when the causative bacteria are known because they lower resistance risk.

Table 1. Contrasting Paradigms of Antibiotic Use in China: From Cultural Medicine to Public Resource.

Aspect	As "Anti-inflammatory Medicine"	As Public Resource
Historical roots	War salvation, barefoot doctors, marketisation	AMR crisis, global stewardship
Cultural meaning	Powerful, fast, personal cure	Shared, finite, needs protection
Core ethic	Autonomy + beneficence	Justice + non-maleficence
Decision driver	Symptoms and expectations	Evidence and resistance risk
Main risk	Overuse and resistance	Underuse and unequal access

This table summarises the fundamental shift in how antibiotics are understood. The transition from a cultural medicine to a public resource requires a corresponding shift in clinical practice and policy [2, 9].

3.3. Applying the Four Principles of Bioethics

The Stanford Encyclopedia of Philosophy's overview of bioethical theory provides a 4-aspect outline for analysing complex medical dilemmas in healthcare: Autonomy, Beneficence, Non-maleficence, and Justice [2]. The ethical complexity of antimicrobial resistance can also be understood in this framework as it can help examine and balance conflicts between patient choice, medical responsibility, and the protection of antibiotics.

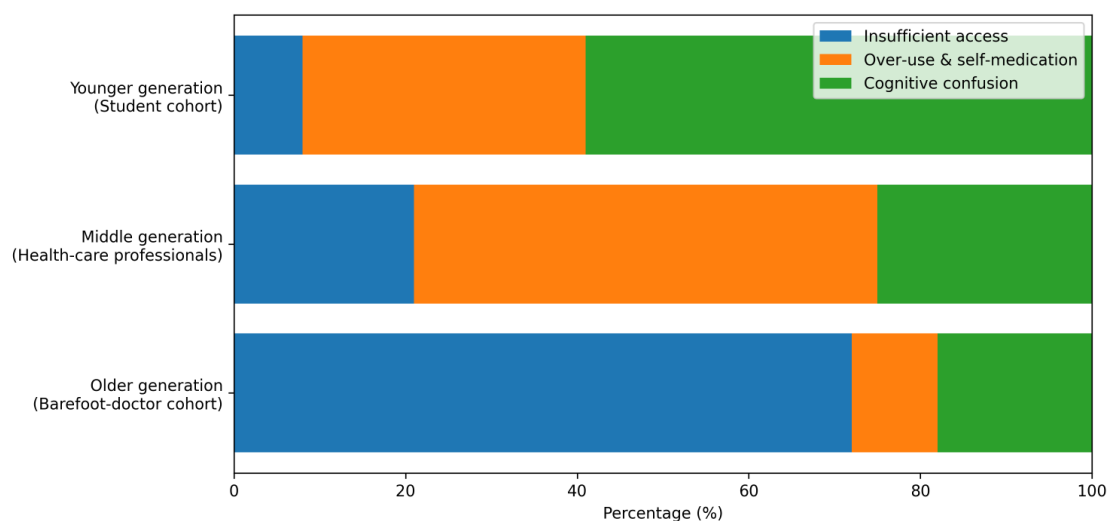


Figure 3. Intergenerational differences in perceived core antibiotic-related problems

3.3.1. Autonomy

Autonomy recognises patients' rights to participate in their own informed healthcare decisions. However, antibiotic requests raise the question of whether choice is truly autonomous when based on misconceptions. If patients understand antibiotics as general anti-inflammatory medicine or cannot distinguish bacterial from viral infections, their decisions may not be fully informed. Therefore, protecting autonomy requires not only allowing choice, but ensuring patients have accurate knowledge to make appropriate decisions.

3.3.2. Beneficence and Non-maleficence

Beneficence is about the duty of the physician to give a treatment that is beneficial to the patient. On the contrary, giving unnecessary antibiotics to the patient is malpractice and goes against the principle of non-maleficence. Therefore, it is imperative to take both the present and the overall situation into consideration.

3.3.3. Justice

Justice is associated with the distribution of positive and negative impacts of using an antibiotic. In cases of the unnecessary use of an antibiotic, the impact on the present patient is a positive one since it is reassuring for the patient, while the resistance impact is a negative one that will be experienced by other patients in the future because they did not contribute to the overuse of the antibiotic. However, reducing the use of an antibiotic is not always just. Rural patients who are disadvantaged may lack access to diagnosis, treatment, and doctors. A national survey found that inappropriate prescribing was higher in less developed regions, highlighting the equity dimension of AMR governance [4].

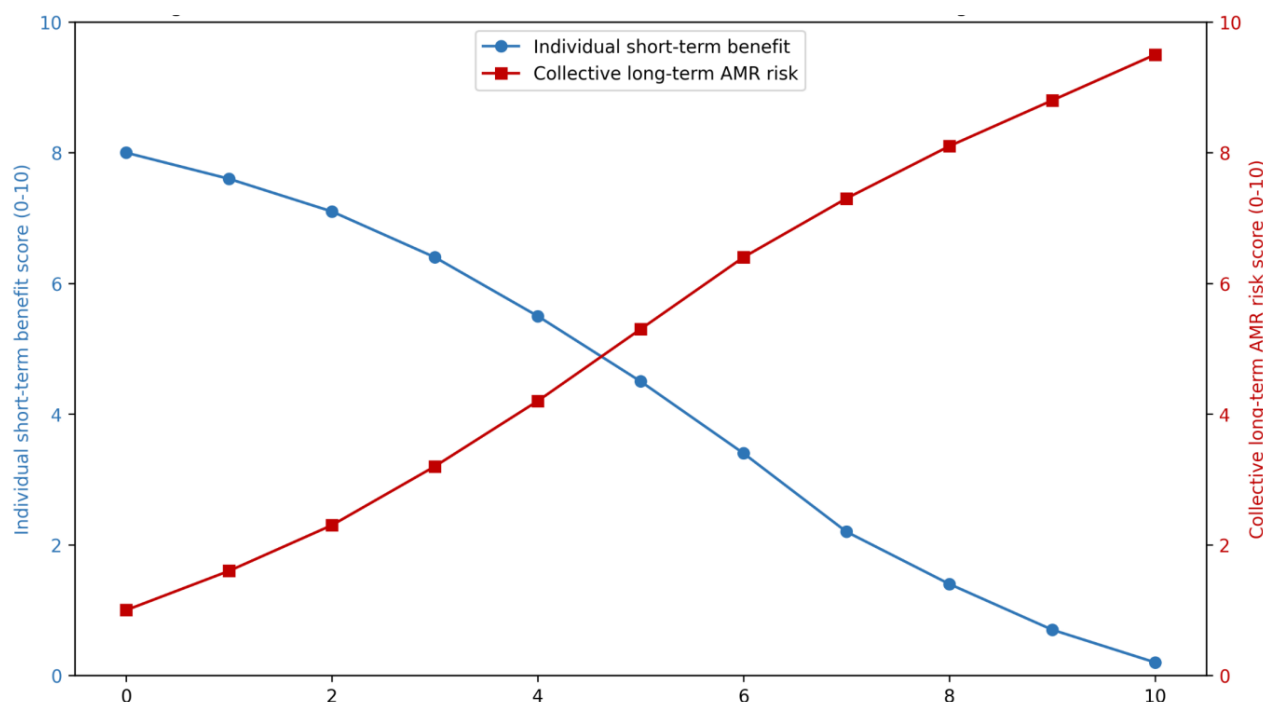


Figure 4. Ethical tension: individual short-term benefit versus collective long-term AMR risk

4. The Ethical Dilemma of AMR Prevention

4.1. Public Protection vs Patient Autonomy

The issue of autonomy arises because of the question of how much control patients can exercise regarding the administration of the medication. The patient is the one who gets sick, and therefore, he or she might think that he or she is supposed to make the ultimate decision concerning the consumption of the antibiotics. This wrong assumption might be a result of past experiences of getting well after consuming the medicine, fear of getting worse, or belief that taking the medication is a crucial step in the treatment process.

Nevertheless, just because the right to autonomy exists does not mean that patients are allowed to be treated with whatever treatment they wish to be given. Medical decisions will be based on medical expertise, and doctors have the obligation to refrain from giving patients treatment that is not needed. Patients can be involved in decision-making when there are options medically indicated, but patients do not get to decide for themselves whether an antibiotic is needed.

It becomes even more difficult when the decisions made by the patient are based on incomplete information or misconceptions. In cases where antibiotics are seen as general “anti-inflammatory medications,” or patients believe that they can be used to treat viral infections, the patients’ request could be an honest preference despite the lack of complete information. It is therefore wrong to present the problem of autonomy and paternalism as two alternatives.

4.2. Availability, Shortage, and Inequality

Dilemma number two relates to patients whose inability to access antibiotics stems from their genuine need for antibiotics. Availability is not simply about having the antibiotic available; it should be appropriate for the infection, timely, reliable, and affordable to the patient. Without this kind of availability, what should be a curable infection can develop into a more dangerous infection, leading to avoidable deaths. The governance of AMR will be morally inadequate if it guarantees availability of antibiotics in the future but at the expense of patients' present needs.

According to the Access to Medicine Foundation report *Shortages, Stockouts and Scarcity* (2018), there are many factors associated with lack of access which do not always include the absence of knowledge and availability of medical resources. The market organization in the pharmaceutical industry can play an essential role in the issue of lack of access [1]. Essential antibiotics are usually old medicines that are relatively inexpensive and do not have any patents left because of their old age. Therefore, the unprofitability of these products can result in leaving of producers from the market, and their supply will become dependent on just a few manufacturers.

Abuse policy may also prove itself to be another difficulty to overcome without taking into account the inequalities that exist beforehand. Additional prescriptions could be introduced to limit access to the medicine in cases where it is easy to purchase them without diagnosis. But at the same time, the same policy could force those individuals who live in disadvantaged areas to do additional work and go another visit to get their medication. In the case of tax imposition, it would reduce the abuse and make these necessary antibiotics unaffordable for poorer people.

Table 2. Summary of Ethical Dilemmas in AMR Governance.

Dilemma	Conflict	Stakes	Key Question
Autonomy vs. protection	Patient request vs. doctor's duty to avoid unnecessary use	Trust in medical authority; informed choice	Whose decision should prevail when patient preference conflicts with evidence?
Access vs. restriction	Ensuring availability for genuine need vs. curbing overuse	Inequality; shortage; resistance	How to restrict misuse without denying access to those in genuine need?

5. Solutions to the Ethical Dilemma of AMR Prevention

5.1. From Patient Autonomy to Informed Autonomy

In order to solve this problem, it is necessary to analyze the moral rights of both the current and the future patients. The right of the current patient to the choice of the treatment has its grounds since these people may feel fear and pressured due to necessity to recover fast in order to go back to school or work. This moral claim should not be viewed as a manifestation of selfishness. Nevertheless, when antibiotics do not have any medical effect on the patient's body, this benefit is lower than the possible risks of resistance.

The future patients are not just an anonymous 'public'. They are patients with pneumonia, those who are going to have surgery, babies, old people, cancer patients, and people with weak immune system. For them an effective antibiotic can be a guarantee of getting rid of an infection. Even though it is rather difficult to trace the effects of resistance on them, their possible harm is much higher than the benefit of using antibiotics in case of mild infections or virus.

However, the patient does not need to make the final choice on his/her own. On the contrary, the patient should make a well-informed medical choice. Therefore, in this situation, the patient should participate in the choice among different medical options which could be reasonably prescribed, whereas the doctor should choose whether to prescribe antibiotics. For example, a patient may believe that antibiotics have an effect on viruses or that every fever requires "anti-inflammatory medicine". In such a way, the desire of the patient is genuine and understandable; however, it does not have enough information and cannot be considered as a medical choice.

There is one practical suggestion how to approach the situation in question. It is possible to classify the use of antibiotics into three categories - necessary, doubtful, and unnecessary one. In case of necessary use of antibiotics, the patient could be made aware of the situation and participate in the process of decision-making concerning treatment. In doubtful cases, further tests or clear instructions about returning could be provided instead of prescription of antibiotics "just in case". In the case when the patient suffers from viral infection or there would be no use from antibiotics for the patient, antibiotics could not be considered as one of the medical choices.

Doctors need to explain clearly what should follow their refusal of using antibiotics. It might seem that nothing has been done, when doctors answer with the words "antibiotics are not needed". Ideally, the doctor will diagnose the cause of the disease, offer alternative treatment for its symptoms and advise on the conditions which necessitate further visits. In this case, not only the patient will receive the refusal but also recommendations. Furthermore, it is possible to convince patients that treatment and antibiotic treatment are two separate issues.

It would not be appropriate to rely on individual doctors to explain anything to the patient since consultations have strictly limited time periods. The hospitals and clinics can provide doctors with explanations which are to be used in consultations. Moreover, notices in the pharmacy and public campaigns can be based on differences such as the inability of antibiotics to treat viral diseases or the fact that not necessarily the broad and more expensive antibiotics are better. The provided information should also include information on necessary and unclear usage of antibiotics instead of dangerous usage of antibiotics.

Thirdly, informed autonomy will rely on the healthcare setting in which the decision is being made. Any attempt at public education will be futile if the pharmacies are still dispensing antibiotics without any checks and balances, there are incentives for doctors to prescribe more drugs, and primary healthcare institutions do not have access to good diagnostics. These situations put too much burden on the patient and doctor. Regulation helped cut down financial incentives for unnecessary prescription, and better diagnostics will help both to arrive at a well-founded decision.

Thus, the goal is not to hand over the complete control to the patients or go back to having only the doctors making decisions. The patients need to be able to doubt, understand and engage in their treatment, yet the decision needs to be made on the grounds of true information and within the scope of medical reasonableness.

5.2. Restricting Misuse While Allowing Access

The second solution must be related to the reduction of unnecessary usage of antibiotics while not interfering with the necessary treatment in any way. The general ban will treat all kinds of usage as a problem while the unnecessary one and the necessary one are completely different from an ethical standpoint. The people that have a bacterial infection should not face the problems or additional costs of getting the medicines because of trying to reduce unnecessary use. Therefore, the AMR management system has to control the unnecessary usage of antibiotics without limiting their supply to those people who really need them.

There can be different approaches to solving this problem including regulating or taxation, but, in both of them, not all types of the medication must be treated the same way. First of all, there must be an approach depending on whether this medicine is needed or not and on the risks of its development of the resistance. The first-line essential antibiotics should be available and cheap when there is a diagnosis of the infection or a high probability of it. However, broad-spectrum antibiotics without a real need for them, "just in case" prescriptions and high-level antibiotics misused may require approval or cost more. The money from the taxation can be used for researches, diagnostics or spreading the information.

However, access also implies a steady supply of the medication and continuous production. Old, important antibiotics are no longer protected by patents, making them affordable. Although their lower price might work in favor of patients, their lack of profitability might decrease the incentives of pharmaceutical companies to produce them. In case there are very few remaining manufacturers,

the risks of shortages and higher prices become higher. The report entitled 'Shortages, Stockouts and Scarcity' proves that the old or inexpensive antibiotic is not always available and its availability depends on the proper functioning of pharmaceutical market, procurement system, and delivery chain [1].

The issue described above is connected with the concept of delinking. The regular business model of the pharmaceutical company includes gaining profit through the sales volume of its product. But in case of antibiotics, the conservation of public health instead of the maximal possible sales volume is needed. According to the source addressing the issue of delinking sales revenues from antibiotic research and development, the company ought to be compensated for producing the antibiotic that has a positive impact on public health rather than for maximizing sales volume. The financial gain might result from various sources such as public financing, prizes, subscription, licensing, and international funding. Some countries have already piloted subscription-style payment models to incentivize antibiotic development while preserving their effectiveness [8].

Given the global scope of AMR, the idea also implies that there is no single country capable of supporting this system. Some kind of international collaboration involving the WHO or any other global organisation will have to be used to tie antibiotic innovations to both conservation and equitable access. Differentiated regulation and delinkage tackle different aspects of the same issue. The first one is aimed at making inappropriate use of antibiotics more difficult while still ensuring the affordability of the needed treatment. The second is intended to promote the development and distribution of antibiotics without relying on their high sales.

6. Conclusion

In other words, it could be mentioned regarding the topic of this essay that the problem of antibiotics misuse in China does not arise from ignorance about medical knowledge on the part of Chinese population. This issue is also related to the culture of antibiotics, which emerged as a result of historical processes. Penicillin was the first medicine associated with modern medicine and life-saving drugs. Afterward, barefoot doctors began to use these medicines within the rural healthcare system, and the marketization of the medical services in the Post Reform and Opening-up era brought about a new paradigm for medicine, doctors, and patients, and antibiotics became popular as effective drugs rather than bacteria infections [16].

These interviews have allowed me to reveal how this perception evolved through generations and still exists to some extent. In case of my grandmother's generation, antibiotics were associated with rare medicines, which were able to save lives. However, at the same time, my medical expert knows about the scientific usage of antibiotics and patient's perception towards such drugs. As for my young interviewee, antibiotics were perceived as specialized medicine although she was not sure about her opinion. Thus, contradictions identified allow me to claim that antibiotic knowledge is not only a matter of education but also a matter of personal experience.

Approaching the issue of AMR from this historical perspective offered me a new angle. While an antibiotic might be prescribed for one patient, its future efficacy does not solely depend on that individual. Unnecessary use will undermine a drug's efficacy for other patients who might have to use that particular medication in the future. Nonetheless, merely reducing access to antibiotics is not enough since certain patients require them. For me, the correct way of addressing this issue involves taking into account the interests of all parties and reducing unnecessary prescriptions while giving patients the possibility to comprehend medical prescriptions and get appropriate treatment.

That is another reason why, for me, antibiotic culture matters for public health policy-making. There is one particular idea that stands out for me after this research and explains why I believe it is so important. The trust in antibiotics that people have nowadays was formed through long processes of experience of severe illnesses and medicine shortages, respect for medical authority, and the idea that more powerful medicine leads to a faster recovery. The simple request to cut down on the use of antibiotics is not enough to take into account all the factors that were responsible for this trust.

Acknowledgements

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