

## Drug Resistance versus Spiritual Resistance: A Comparative Analysis from the Perspective of Spiritual Health

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### Abstract

**Background and Objectives:** Taking into account a few principles concerning human being, it becomes plausible that the human spirit would also have a similar reaction to spiritual “medicine” provided to it. In order to better understand how this is possible, we must consider the means by which the human spirit becomes resistant to spiritual remedies and compare them with the resistance developed by the body against physical drugs. As such, this research aimed at creating a comparative analysis between the elements that cause the human spirit to become resistant against spiritual remedies in comparison to the body’s resistance against physical treatments (e.g. drugs and other physical treatment).

**Methods:** The research at hand highlights the conclusions of an overall study of the Holy Quran, books of Islamic narration, and extensive Internet research concerning this subject. With these resources, the various aspects of the spirit’s resistance against spiritual remedies were discussed in detail.

**Results:** According to Holy Quran and Islamic narrations: Based on the expectations which God has of man, his heart (i.e. spirit) has the potential to fall under one of two categories – positive or negative. An afflicted heart may at times, like an afflicted body, become resistant against a remedy designed to cure it. In both cases of physical or metaphysical resistance, the underlying element that causes this resistance as well as the symptoms which accompany it are similar to one another. Having considered the teachings found in religious texts, this research discovered the underlying causes of spiritual resistance, and outlined some solutions which can prevent this issue from arising in the first place.

**Conclusion:** Based on the standards of health and spiritual wellbeing as outlined in Holy Quran, it is said that some hearts are unhealthy and require treatment and healing. In Holy Quran, there is also no doubt in it, guidance to the God wary. Considering the fact that Holy Quran is the Word of God, we establish our full confidence and trust within it. Therefore, the causes and symptoms of spiritual resistance against metaphysical cures, which have been outlined in this article, have been taken from Quranic teachings and should be carefully studied.

**Keywords:** Drug Resistance; Spiritual Resistance; Medication; Spiritual Health.

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### Introduction

Treating illness is one of the two main pillars in the science of medicine. When an effective treatment is discovered for an

illness, this brings about a sense of hope and ease in both the patient and physician alike. On the other hand, when a prescribed treatment is ineffective or, even worse, it negatively impacts the patient and becomes a cause of

great concern. When faced with a patient, the goal of every physician or health-care provider is to provide medication or a regimen that will have the greatest chance in curing them of their ailments to the greatest extent possible, using the least amount of treatment necessary. Unfortunately, the treatment prescribed does not always have the desired effect upon a patient and this is due to a number of reasons. A clear example of this can be seen in the realm of pharmaceuticals and prescription drugs. It is often witnessed that these drugs not only fail to cure a patient, but rather negatively impact them through adverse effects, side effects, allergies, or even make the patient resistant against that particular type of drug. When the latter occurs, the medication potential to treat the illness for which it was prescribed is often significantly reduced or even eliminated.

Throughout history, the adverse effects of drugs have been discussed at length in both religious works as well as books on the history of medicine. Concerning this subject, Imam Ali (as) states,

*“At times, a remedy may result in suffering and [at other times] suffering may result in a remedy”* (1). For this reason, it has been recommended that a person refrain from immediately referring to a physician or using medication at the onset of an illness. A person should instead, reasonably of course, exercise some patience and tolerate the difficulties that accompany his illness. Needless to say, if the illness continues and symptoms persist or worsen, it is advisable to seek medical counsel. The Prophet of Islam (ﷺ) has been quoted as having said,

*“Abstain from remedies as long as your body can tolerate the pain and approach them when your body can no longer withstand it”* (2).

Imam Kazem (as) states,

*“There is no medicine which does not provoke pain and there is nothing better for the body than abstaining [from certain foods or drugs], except at times when they become absolutely necessary”* (3). In this narration, the Imam (rh) clearly mentions the adverse effects of drugs and highlights the importance of abstaining from them unless it is truly needed.

Bearing this in mind, it should be noted that the first and foremost step which should be taken to promote healing and ensure good health lies in a person’s diet. Meaning, one should be mindful of their overall diet and reform their eating and drinking habits where necessary. The Holy Quran emphasizes this point when it states,

*“Then let mankind look at his food”* (4).

The second point of importance lies in exercising restraint when it comes to food.

Concerning this, the Holy Prophet (ﷺ) states, *“Abstinence is the root of all cures”* (5).

Finally, if the previous steps do not suffice in curing a person of their ailment, the third and final step that should be taken is to seek medical counsel and treatment through medication. This final step should be approached as a last resort after the first and second steps have already been taken.

The side effects of medication highlight an issue which has always been prevalent in both modern and traditional medicine alike. Concerning this matter, Avicenna (Ibn Sina) says, “Medication brings about ease while inflicting suffering” (5). Avicenna himself was an advocate of therapeutic exercise for treating problems such as a surfeit or eliminating excesses within the body. Concerning this matter he states, “If it [the bodily excess] is eliminated through means of toxic medication, the medication itself diminishes the body’s vigor and causes fatigue. If it is possible to provide treatment through non-toxic medication, a heavy burden will still remain upon the physician. Although the medication may purge the bodily excesses, however, the beneficial phlegm and moisture, which are the essence of life and grant the body vigor and fluidity, are not immune to its harm. It [the medication] will also eliminate some of that, effectively reducing the strength of both the primary and secondary muscles. Therefore, exercise is a solution which makes us needless of consuming medication and is in fact the best inhibitor of surfeit” (5).

Razie also states, “Do not consume a medicine for a long period of time because the body will become resistant against it” (6). Regarding this statement of Razie, Dr. Sayyid

Mahmoud Tabatabaie writes, “One of the exceptional points found in the works of Razi is his observation on the body’s resistance against medication administered for a lengthy period of time” (6).

Today, these issues remain as areas of concern. In fact, it has gained so much attention that in the year 2011 the World Health Organization (WHO) adopted the slogan of “Antimicrobial Resistance” as its slogan of the year. Since then, medical research centers have conducted extensive research and held conferences discussing the underlying causes of this problem as well as potential solutions (7). Their objective is to highlight the dangers of drug resistance and call for a global response to the issue (8, 9).

According to a report issued by Doctors without Borders, excessive and inappropriate use of medication (namely antibiotics) amongst the masses has resulted in an increased number of bacteria resistant to antibiotics. Additionally, they have noted that if these state of affairs persist at this rate, man’s predicament will regress to circumstances prevalent before the 1920s; meaning, prior to the discovery of penicillin (10). As a result, it has been said that we are approaching an era in which even the most simple of infections may become unresponsive to prescription medication. The WHO firmly believes that the primary cause of this resistance is the inappropriate use of antibiotics worldwide (11). Concerning this issue, Dr. David L. Heymann, who heads the Antibiotic Resistance Research Center says, “Success in treating many forms of illnesses including cancer, organ transplant, etc. depends on our capacity to treat infections. If we cannot treat infections, all methods of modern medicine will encounter significant problems (12). In addition, Dr. Christine McCartney Executive Director for HPA Microbiology Services states, “Antibiotic resistance makes the task of treating infections very difficult. As a result, illnesses can easily spread worldwide without there being a drug to cure them (10, 11, 13). Ban Ki-moon, the Secretary-General of the United Nations has also stated the following concerning antimicrobial resistance: “Drug resistance imposes huge costs on health

systems and is taking a growing – and unnecessary – toll in lives, threatening to roll back much of the progress we have made towards the health-related Millennium Development Goals.” “Moreover, the current problem may undermine the gains of other modern medicines and technologies used to fight non-communicable diseases.” He told, “Today, the WHO is calling for action to raise accountability and halt the spread of drug resistance through a six-point policy package: joint planning; surveillance; drug regulation; rational use of medicines; infection prevention and control; innovation and research” “Governments, industry and all stakeholders must answer the call. Global health and untold millions of lives are at risk (13). As such, the aim of this research is to create a comparative analysis between the elements that cause the human spirit to become resistant against spiritual remedies in comparison to the body’s resistance against physical treatments (e.g. drugs and other physical treatment).

### **Methods**

The research at hand highlights the conclusions of an overall study of the Holy Quran, books of Islamic narration, and extensive Internet research concerning this subject. With these resources, the various aspects of the spirit’s resistance against spiritual remedies will be discussed in detail.

### **Results and Discussion:**

#### **What is Drug Resistance?**

Drug resistance is a state in which organisms gain the capacity to resist the influence of antimicrobial drugs. When this occurs, microorganisms such as bacteria, viruses, fungi and parasites adapt in a manner that causes the medication which was previously used to treat them (e.g. antibiotics, antifungal, anti-parasitic, antiviral, chemotherapy drugs, etc.) to become ineffective. If left uncontrolled, this resistance will increase, becoming both a threat to life and the limited resources of healthcare systems (11, 12, 14, 15)

## Spiritual Resistance against Metaphysical Cures

In addition to his physical existence, man is a being who also possesses a spirit. Though the human body and spirit share many commonalities in both illness as well as health, the Holy Quran has defined and expounded upon spiritual health in a unique manner. While topics pertaining to physical health are discussed in the science of medicine, spiritual wellbeing is a subject which pertains to the field of ethics or *akhlaq*. Therefore, scholars of ethics are considered the “physicians” of man’s spirit. In his letter to Prophet Jesus (Ýa), the prominent Greek physician Galen writes, “From the physician of the body to the physician of the spirit (16).

The issues of drug resistance and the side effects of medication are topics discussed extensively in the science of medicine. It is not unlikely that similar issues must also exist among its spiritual counterpart, namely, the science of ethics. In order to better understand the causes of spiritual resistance and provide reasonable solutions, it is critical that this subject be researched and understood. The current study is the product of extensive research on this very topic.

This subject has been addressed at length in books of Islamic narration (*Hadith*) and exegesis (*Tafsir*) of the Holy Quran under titles such as “*Qasawt-qalb*” (hardening of the heart), “sealing of the heart,” “death of the heart,” and other titles. However, what makes this article unique is that it has formed a comparative analysis between two different (but very similar) forms of resistance, one being physical and the other spiritual. The “physical resistance” spoken of refers to antimicrobial resistance against drugs while the “spiritual resistance” refers to the spirit’s resistance against metaphysical remedies (e.g. prayer, supplication, etc.). In addition to this comparison, select Quranic verses pertaining to this subject have been presented in order to form a more in-depth analysis.

## The Holy Quran and Differing Responses to Spiritual Medicine

God states in the Holy Quran that He has

presented His Book as a cure for the hearts. He states,

“*O mankind! There has certainly come to you an advice from your Lord, and a cure for what is in the breasts... (17,21).*”

Imam Baqer (Ýa) states,

“*And he who reads the Quran places the cure of the Quran upon his heart (22).*”

However, God has also made the effect of cure exclusive to only certain hearts. Concerning this He states,

“*Say, ‘For those who have faith, it is guidance and healing (Al-Fussilat 44).*”

In another part of the Quran, He states,

“*We send down in the Quran that which is a cure and mercy for the faithful; and it increases the wrongdoers only in loss (Al-Isra 82)*”

Therefore, according to the Holy Quran, hearts are of two kinds: those that benefit from its message, and as a result, are healthy and those that do not and are ill, suffering from spiritual ailments. As for the latter, if they are not cured and maintain that same state, the heart will forever lose its potential to be cured by the Quran’s spiritual remedies. This degree of resistance against spiritual medicine (in this case the Holy Quran) is called “*Qisawat*” (hardening) or “*Qasawt-qalb*” (hardening of the heart).

## Hardening of the Heart or Spiritual Resistance to Metaphysical Remedies and Cures

“*Qisawat*” has been defined as “becoming hardened or dense (Al-Yasin 30). A person whose heart has hardened in this sense is incapable and unwilling to hear the message of the Holy Quran or the warnings and advice of the Prophets (Ýa). Instead of being resistant against illnesses such as polytheism, debauchery and hypocrisy, a person with a hardened heart will become resistant to God’s Divine message which is the cure to these spiritual woes. Heartfelt advice, requests, and warnings will have no effect on such a person because he considers all of this as frivolous and worthless. Concerning these people God states, “*How regrettable of the servants! There did not come to them any apostle but that they used to deride him (Al-Yunus 90 -91).*”

Curing such an illness is very difficult. The renowned teacher of ethics, Mulla Ahmad Naraqi writes, “And treating this trait, eliminating this hardening [of the heart], and acquiring mercy is a task of utmost difficulty. This is because *Qisawat* is a trait firmly rooted in the spirit and whose abandonment is not easily achieved (Al-Yunus 98). Perhaps the reason why the cure to this disease has been called “*Muqasah*” (which is derived from the same root word as *Qiswat*) (Al-Anam 158), meaning “suffering,” is due to the difficulties which one encounters in purging this trait of their spirit.

Bearing these points in mind, we must now consider two things:

First, it should be understood that the elements causing the heart to harden become resistant against spiritual remedies. Then, this form of resistance should be compared with the factors that result in drug resistance within the human body. Second, the conclusions of this comparison should be assessed, and finally, a preventative solution should be presented. However, prior to embarking on this task, it would be beneficial to look over some facts and figures pertaining to this subject.

### Facts and Figures

The Centers for Disease Control and Prevention (CDC) have stated that in the year 1997, over 50% of all antibiotics administered were unnecessarily prescribed. Furthermore nearly 80% of all patients did not complete their full dosage, leaving treatment incomplete (10).

According to Dr. Sayid Waqafi, the secretary of the Iranian Association of Pharmacists, Iranians use 10-15% of the nation’s drugs arbitrarily, without the guidance of a physician. Otherwise, the Minister of Public Health, states that 40% of Iranians use medication arbitrarily, without a physician’s prescription. As a result, each year tens of thousands of people experience adverse effects resulting from the use of incorrect medications and doses. The average Iranian uses 339 drug items annually – four times the worldwide average. In Iran, the average prescription is written for each person contains 3.2 drug items while the worldwide

average is 1.2 (10-15).

### Causes of the Body’s Resistance against Drugs

In summary, the following factors cause a microorganism to become resistant against antibiotic medication (Table. 1):

- 1) Failure to use medication.
- 2) Self-medication

This may create problems such as using low-quality medication, using an incorrect dosage, implementing an incorrect prescription, overdosing, etc. These actions, which are unfortunately all too common, pose significant dangers to the overall health system of a nation.

- 3) Delaying the use of appropriate medication.
- 4) Inadequate measures to prevent and control infection.
- 5) The spread of resistant organisms throughout society and among nations.
- 6) Inadequate systems to supply medication and control their quality.

### The Causes of Hardening of the Heart and Resistance against Spiritual Medicine

Interestingly, the elements which cause the heart to harden and become unaffected by spiritual medicine are very similar to those which were detailed above regarding physical drug resistance. Those causes are reiterated and expounded upon below (Table 1):

- 1) Failure to use medication.

“*As for the faithless, it is the same to them whether you warn them or do not warn them, they will not have faith. Allah has set a seal on their hearts...*”(25).

Faithlessness (*kufr*) is a spiritual disease, which if left uncured through means of belief (*Iman*), can lead to dangerous repercussions such as spiritual resistance. In the book *Tafsir Saf*, a work of Quranic exegesis by Fayz Kashana, 1994, the following has been narrated from *Imam Riza* (Ýa) concerning the verse which speaks of a seal being set upon the hearts of the faithless:

“*The sealing of the hearts of the faithless is the consequence of their own disbelief.*”(22).

2) Attempting to cure oneself without proper knowledge and insight.

As was stated before, the Holy Quran is a source of spiritual remedy. However, if a person attempts to use it (i.e. through assuming its meanings, forming their own exegesis of verses, etc.) without proper knowledge and guidance, this would definitely be deemed an incorrect approach. In fact, self-administration of spiritual remedies in this manner may result in worsening one's condition. This is why the Holy Quran instructs us to seek knowledge and guidance from those who do possess this understanding and insight:

*"Ask the People of the Reminder if you do not know."*(Al-Nahl 43).

*Shaytans* (devils), on the other hand, urges man to act ignorantly and attribute falsehood to God and His Holy Book:

*"He only prompts you to [commit] evil and indecent acts, and that you attribute to Allah what you do not know"*(Al-Nahl 43).

3) Delaying the use of appropriate medication:

In the realm of physical illnesses, failure to use an appropriate drug in a timely manner often results in the condition worsening to a degree where medication is no longer beneficial. At times, this may even result in fatality. The human spirit's need in regard to spiritual medication is no different. For example, consider the concept of embracing *Tauhid* (the oneness of God and all His attributes). According to the Holy Quran, belief in God (which was mentioned earlier to be the cure to faithlessness) is of little value when a person is left with no other recourse. This was the case with Pharaoh when death was about to overtake him and he witnessed Divine punishment before him. The Holy Quran narrates him as saying, "I believe that there is no god except Him in whom the Children of Israel believe, and I am one of those who submit [to Him]!" (Al-Yunus 90-91). However, he was told, "What! Now? When you have been disobedient heretofore and were among the agents of corruption?!"(Al-Yunus 90-91).

In the Holy Quran, God states the following to those who have been faced with Divine punishment:

*"Why has there not been any town that might believe, so that its belief might benefit it, except the people of Jonah? When they believed, we removed from them the punishment of disgrace in the life of this world, and provided for them for a while"*(Al-Yunus 98).

In another chapter, He states:

*"The day when some of your Lord's signs do come, faith shall not benefit any soul that had not believed beforehand and had not earned some goodness in its faith"* (31).

*Mulla Ahmad Naraqı* writes, "Repent before sins lay waste to your belief, preventing you from observing piety or seeking remedy from spiritual therapists; before advice does not affect you and counsel provides you with no benefit; before you consider all advice as fantasies, making you worthy of Divine punishment; before neglect encompasses your sight, hearing, and heart"(23)(Table. 1).

4) Inadequate measures to prevent and control infection:

The nature of an infection is such that it will spread if measures are not taken to contain and eliminate it. In the case of some infections, this may prove fatal. Again, this example is not only applicable to the physical body but the spirit as well. From the perspective of the Holy Quran, immorality and misdeeds are infections which contaminate the human spirit; and if left uncontrolled, can lead to spiritual suicide. In the words of the Holy Quran,

*"Then the fate of those who committed misdeeds was that they denied the signs of Allah and they used to deride them"*(Al-Rum 10).

The Holy Quran then reminds us that the spread of these spiritual infections leads to bitter outcomes and may even kill a person's spirituality:

*"So observe how the fate of the agents of corruption was!"*(Al-Namel 14), *"Travel over the land and observe how was the fate of the guilty."*(Al-Namel 69).

5) The spread of resistant organisms throughout society and among nations.

With the advancement of modern methods of transportation, travelling between various cities and countries has become fairly easy. People of different nations and backgrounds are capable

of living and interacting with each other within one environment. Although many benefits can be gained from this advancement, one problem is that the potential for spread of resistant organisms is now greater than ever before. Given this scenario, it is critical that the manner in which people interact with one another be carefully calculated and outlined. Again, these cautionary steps are applicable both to the realms of physical and spiritual resistance. The Holy Quran urges Muslims to refrain from participating in gatherings contaminated by faithlessness and heresy. In fact, it urges them to swiftly leave such environments or risk becoming polluted by the vice prevalent therein. It states,

*“Certainly He has sent down to you in the Book that when you hear Allah’s signs being disbelieved and derided, do not sit with them until they engage in some other discourse, or else you [too] will be like them”*(Al-Neisa 140).

Furthermore, the Holy Quran mentions the reason why some will find their place in perdition and Hell is because they would partake in unwholesome gatherings filled with faithlessness, ridicule, and vice. When asked what drew them into Hell, they say:

*“We were not among those who prayed. Nor did we feed the poor. We used to indulge in [profane] gossip along with the gossipers, and we used to deny the Day of Retribution until death came to us”*(Al Muddaathir 43-47).

Spreading indecency and vice, an act which promotes spiritual resistance, has been heavily rebuked and forbidden by the Holy Quran. As for those who partake in spreading indecency and encourage others to partake in it, they have been told of a painful punishment:

*“Indeed those who want indecency to spread among the faithful—there is a painful punishment for them in the world and the Hereafter, and Allah knows and you do not know.”*(Al-Nur 19).

6) Inadequate systems to supply medication and control their quality:

Throughout the history of Islam and Muslims, there has always been a custom of establishing meetings and circles where Divine knowledge

is promulgated. In these gatherings, topics concerning the Holy Quran, Quern exegesis, jurisprudence, theology, Gnosticism, and many other subjects are discussed. Unfortunately, at times these gatherings err from the path of Divine guidance and become infused with incorrect understanding, personal beliefs, and even polytheistic ideology. To make matters even worse, these incorrect teachings are then presented to the masses as religious teachings with the notion that they contain remedies for the human spirit. This unfortunate reality has existed in the history of all peoples and religions as it continues to this day. Concerning those who partake in this act of misguidance the Holy Quran states,

*“So woe to them who write the Book with their hands and then say, ‘This is from Allah’...”*(Al-Baqarah 79)(Tabel.1).

After the decease of the Prophet of Islam, Muhammad (ﷺ), and the incidents which occurred afterward, the religious, cultural, and political atmosphere within the Islamic *Ummat* (nation) was in such a state where the spiritual medicine needed by the people was deficient in both quantity and quality.

Ayatollah Jawedi Āmuli has mentioned two primary elements that cause the heart to harden, or as the Holy Quran terms it, become “sealed”. The first element is submitting to one’s desires. If a person continues to pursue his desires instead of focusing his attention upon God, even after the Truth has become clear to him, he shall deviate and become deserving of Divine retribution. The second element which has been mentioned is committing sins and partaking in vice (24).

The following causes have also been mentioned, which according to the Holy Quran, are elements that result in the hardening of the heart: breaking promises, speaking excessively, considering life as being lengthy (i.e. being forgetful of death), engaging in frivolous acts, excessive wealth, looking at stingy individuals, engaging in frivolous speech, harboring non-Divine love, repeating sins, seeking the company of the wealthy and those devoted to luxury and leisure, remaining in private quarters with [non-*Mahram*] women, maintaining the company of misguided

individuals, and excessive laughter.  
It has been narrated that a man went to the Holy Prophet (ﷺ) and complained to him of a

hardened heart. The Prophet (ﷺ) responded, *“If you desire for you heart to soften, feed the helpless and caress the heads of orphans”*(25).

**Table 1: The Cause of Drug Resistance in the Physical Realm and Drug Resistance In the Spiritual Realm**

The Cause of Drug Resistance in the Physical Realm	The Cause of Drug Resistance In the Spiritual Realm
Failure to use medication.	Failure to use medication: “As for the faithless, it is the same to them whether you warn them or do not warn them, they will not have faith. Allah has set a seal on their hearts...” (Al-Baqarah 6-7)
Attempting to cure oneself.	Attempting to cure oneself: “Ask the People of the Reminder if you do not know.” (Al -Nahl 43)
Delaying the use of appropriate medication.	Delaying the use of appropriate medication: “What! Now? When you have been disobedient heretofore and were among the agents of corruption?!” (Al-Yunus 91)
Inadequate measures to prevent and control infection.	Inadequate measures to prevent and control infection: “Then the fate of those who committed misdeeds was that they denied the signs of Allah and they used to deride them.” (Al- Rum 10)
The spread of resistant organisms throughout society and among nations.	The spread of resistant organisms throughout society and among nations: “We were not among those who prayed. Nor did we feed the poor. We used to indulge in [profane] gossip along with the gossipers, and we used to deny the Day of Retribution until death came to us.” (Al-Modaser 45) Spreading indecency and vice, an act which promotes spiritual resistance, has been heavily rebuked and forbidden by the Holy Quran: “Indeed those who want indecency to spread among the faithful—there is a painful punishment for them in the world and the Hereafter, and Allah knows and you do not know.” (Al-Nour 19)
Inadequate systems to supply medication and control their quality.	Inadequate systems to supply medication and control their quality: “So woe to them who write the Book with their hands and then say, ‘This is from Allah’...” (Al-Baqarah 79) After the death of the Prophet of Islam, Muhammad (ﷺ), and the incidents which occurred afterward, the religious, cultural, and political atmosphere within the Islamic <i>Ummat</i> (nation) was in such a state where the spiritual medicine needed by the people was deficient in both quantity and quality.

**The Consequences of Drug Resistance in the Physical Realm**

The following are just some of the negative consequences of drug resistance:

- 1) An increase in illness and a prolonged time of healing.
- 2) Dangerous side effects.
- 3) An increase in financial burden upon both the individual and health system.
- 4) Spreading illness to others.
- 5) Annihilation and death (Table. 2)

**The Consequences of Drug Resistance in the Spiritual Realm**

The consequences of spiritual resistance are similar to that of physical resistance. They are dealt with at length below:

- 1) An increase in illness and a prolonged time of healing.

The Holy Quran states,  
*“There is a sickness in their hearts; then Allah increased their sickness...”*(Al-Baqarah 10).

It is very difficult for a person to accept change and promote healing within his spirit. At times, this becomes nigh impossible:

*“If you invoke them they will not hear your invocation, and even if they heard they cannot respond to you...”*(Al-Fatir 14).

- 2) Dangerous side effects.

An ailing heart is a breeding ground for spiritual illness. Its side effects can be seen within one’s ethics, cultural disposition, beliefs, etc. Concerning this, the Holy Quran states,

*“But as for those in whose heart is a sickness, it only adds defilement to their defilement”*(Al-Tawwbeh 125).



3) An increase in financial burden upon both the individual and health system.

In order to combat spiritual resistance, significant effort and resources must be expended, which may ultimately prove to be ineffective. Regarding this the Holy Quran states,

*“Even if you plead forgiveness for them seventy times, Allah shall never forgive them because they defied Allah and His Apostle; and Allah does not guide the transgressing lot”*(Al-Tawbeh 80).

Forgiveness is a form of remedy that cleanses a heart polluted by sin. However, God states in this verse that the intercession made through the Holy Prophet (ﷺ) in seeking forgiveness – if even performed fifty times – will not bring about His forgiveness.

4) Spreading illness to others.

The illness of an individual rarely remains contained within that person. Rather, it is

transmitted and spreads to other people, and eventually, society at large. Like the work of termites, the spread of illness eats away at the foundation of ethics, spirituality, and beliefs of a society. The Holy Quran states,

*“Had they gone forth with you, they would have only added to your troubles, and they would have surely spread rumors in your midst, seeking to cause sedition among you”*(46).

In another chapter God states,

*“They dissuade [others] from [following] him, and [themselves] avoid him...”*(Al-Anam 26).

5) Annihilation and death.

The Holy Quran states,

*“Do not unduly exceed the bounds in your religion and do not follow the fancies of a people who went astray in the past, and led many astray, and [themselves] strayed from the right path”*(48) (Table.2).

**Table. 2: The Consequences of Drug Resistance in the Physical Realm and Drug Resistance in the Spiritual Realm**

The Consequences of Drug Resistance in the Physical Realm	The Consequences of Drug Resistance in the Spiritual Realm
An increase in illness and a prolonged time of healing.	An increase in illness and a prolonged time of healing: “There is a sickness in their hearts; then Allah increased their sickness...” (Al-Baqarah 10)
Dangerous side effects.	Dangerous side effects: “But as for those in whose heart is a sickness, it only adds defilement to their defilement...” (Al-Tawbah 125)
An increase in financial burden upon both the individual and health system.	An increase in financial burden upon both the individual and health system: Significant effort and resources must be dedicated, which may ultimately prove to be ineffective: “Even if you plead forgiveness for them seventy times, Allah shall never forgive them because they defied Allah and His Apostle; and Allah does not guide the transgressing lot.” (Tawbah (9):80)
Spreading illness to others.	Spreading illness to others: “Had they gone forth with you, they would have only added to your troubles, and they would have surely spread rumors in your midst, seeking to cause sedition among you.” (Al-Tawbah 80)
Annihilation and death.	Annihilation and death: “Do not unduly exceed the bounds in your religion and do not follow the fancies of a people who went astray in the past, and led many astray, and [themselves] strayed from the right path.” (Al-Tawbah 47)

**Methods of Combating Drug Resistance in the Physical Realm**

- 1) Eliminating the cause of infection (i.e. bacteria, fungi, parasites, viruses).
- 2) Eliminating the cause of drug resistance.
- 3) Continuously monitoring microbial resistance and gaining sufficient knowledge on how different microorganisms resist various

drugs. It is also pertinent that the extent, severity, and different types of drug resistance be determined.

- 4) Establishing laboratories that are capable of quickly determining the causes of illness as well as identifying drug resistance.
- 5) Administering quality drugs which are appropriate for that given illness.

6) The pharmaceutical industry focusing on developing drugs capable of combating resistant microorganisms.

7) Increasing oversight in food industry where animals (such as cattle, poultry, and even honeybees) are provided antibiotics. If these antibiotics are administered without just cause, they will be indirectly transmitted to humans who consume those animals and their products. This, too, results in an indirect form of drug resistance.

8) Monitoring and managing social interaction as well as travel and transportation between various cities and countries, for the sake of public health. (Table. 3).

### Methods of Combating Drug Resistance in the Spiritual Realm

1) Eliminating the cause of infection.

Seeking refuge in the remembrance of God eliminates the presence of *Shaytans*, a great source of *spiritual illness, within one's spirit*. *The Holy Quran states,*

*"We assign a devil to be the companion of him who turns a blind eye to the remembrance of the All-beneficent"*(Al-Zukhruf 36).

The Holy Quran also teaches us to seek refuge in God against *Shaytans*, and their temptations so that they cannot inflict us with their illness.

*"My Lord! I seek Your protection from the promptings of devils, and I seek Your protection, my Lord, from their presence near me"*(Al-Muminun 97-98).

This is because *Shaytan*, like malignant microbes, creates a breeding ground for infection and illness. The Holy Quran states,

*"As for him who has Satan for his companion—an evil companion is he!"* (Al-Nisah 38)

2) Eliminating the cause of drug resistance.

The importance of combating the causes of drug resistance within the realm of spirituality was discussed earlier.

3) Continual monitoring of resistance.

Needless to say that people vary in their degree and form of spiritual resistance. Regardless of whether their resistance is against Divine verses, Messengers (Ya), or other forms of guidance, we must first become

fully aware of the circumstances surrounding their illness prior to treating them. The circumstances unique to each patient may include, but are not limited to, their state of mind, their particular form of resistance, the degree of resistance, and the causes and inclinations of that resistance.

4) Establishing laboratories that are capable of quickly determining the causes of illness as well as identifying drug resistance.

Although the capabilities of modern laboratories have witnessed significant advancements and progress throughout time, the object of today's predicament (i.e. a myriad of diseases, infections, etc.) has also undergone significant advancement and change. Therefore, laboratories must be sufficiently equipped to swiftly detect both drug resistance itself as well as its severity.

According to the Holy Quran, some Divine tests are presented in order that the resistance of a person or people be determined:

*"Certainly We tested those who were before them. So Allah shall surely ascertain those who are truthful, and He shall surely ascertain the liars"*(Al-Ankabut).

At other times, these tests are presented annually (or more frequently) in order to determine the extent and severity of resistance:

*"Do they not see that they are tried once or twice every year? Yet they neither repent, nor do they take admonition"*(Al-Tawbah 126).

5) Administering quality drugs which are appropriate for that given illness.

In the realm of spirituality, administering a quality remedy appropriate to the illness at hand is extremely important.

In some scenarios, a person may require giving hope while in others a sense of concern and fright should be conveyed. Some circumstances may necessitate reprimanding the individual, while others may call for forgiveness. At times, financial and material assistance should be provided. In some cases, a person should be granted freedom, while another may require limitations of certain freedoms. These are just some examples of actions that may be necessary when treating a spiritually ailing heart of its resistance. There are, of course, many more situations that may

demand a different approach.

Prophets, who are the best physicians and healers of the human spirit, use the remedies found within God's Holy Book and Divine revelation in order to treat people. The Commander of the Faithful, *Imam Ali* (Ýa), describes the Prophet of Islam (Ò) in the following manner:

*"The Prophet is like a roaming physician who has set ready his ointments and heated his instruments. He uses them wherever the need arises for curing blind hearts, deaf ears, and dumb tongues. He follows with his medicine in search of those forgotten and left wandering"*(26).

After Holy Prophet (Ò), his Ahlal-Bayt (Ýa) are the ones who possess true knowledge of God's religion and the needs of mankind. In *Hadith al-Thaqalayn*, the Holy Prophet (Ò) himself instructs us to seek Divine knowledge and wisdom from his immaculate household. In prescribing a means of protection from spiritual illness and deviation, he places the rank of the Ahlal-Bayt (Ýa) next to that of the Holy Quran. In one of his sermons, Imam Ali (Ýa) mentions God's remembrance as a key to curing an ailing heart. He says,

*"Certainly, Allah, the Glorified, the Sublime, has made His remembrance the light for hearts which hear with its help despite deafness, see with its help despite blindness and become submissive with its help despite unruliness"*(27).

6) Developing modern drugs that are capable of combating immorality and vice.

The art of eloquence is an important instrument in conveying the message of religion. Therefore, the Divine message should be delivered in a contemporary manner that is both relevant and appealing to the audience. Other important points worthy of consideration are the environment and social atmosphere in which religious teachings are to be taught.

The Prophets (Ýa), who served as conduits of God's message, were effective in their task partly because of their capacity to communicate with the people in their own tongue, while bearing in mind the various concerns of that time. Regarding this the Holy Quran states,

*"We did not send any apostle except with the language of his people, so that he might make [Our messages] clear to them"* (56).

Speaking in a contemporary manner that considers the unique needs of a particular atmosphere and era are both components of speaking in the "language" of a people.

Therefore, in face of modern spiritual resistance, it is necessary that the spiritual medication of the Holy Quran and the Ahlal-Bayt (Ýa) be administered in a manner which is relevant to this age. One of philosophies which explain why an infallible Imam must be present in every day and age is due to this very reason. There must always exist a Divine leader who is capable of responding to the needs and inquiries of a society in every age. This also explains the need for *Fuqaha* (Islamic jurists) during the period of the Twelfth *Imam's* (Ýa) *Ghaybah* (occultation).

7) Increasing oversight in the food industry where animals are given antibiotics.

When it comes to consuming animals and animal products, our concern extends beyond just the food that they have been given or the drugs with which they are provided. Of course, this is an area of concern that should be carefully monitored; however, there are other aspects to be considered as well.

Different animals possess different traits and temperaments – some positive and others negative. When a human being consumes and animal, they inherit that animal's various qualities and traits. This can be seen as a spiritual nourishment (or malnourishment if the animal possesses negative attributes) on a par with the physical benefits (or harms) gained by consuming that animal, i.e., calories, protein, fat, etc (28).

Islam has forbidden the consumption of particular animals because of certain negative traits that they possess. These traits may be found within the character of the animal itself, its diet, or even its manner of living. For example, one of the negative traits of swine is their lack of *Qirat*. If a human being were to consume the flesh of a pig, they too would come to possess this negative trait. It was asked of *Imam Riza* (Ýa) why the flesh of carnivorous animals and birds of prey had been

forbidden. He responded,

*“It is because they consume things such as carrion, human flesh and excrement”*(29).

The *Imam* (Ýa) also explains that consuming blood is forbidden because,

*“It results in hardening of the heart and lessens a person’s affection [toward others] to such an extent that one will lose belief and trust in [even] their relatives and companions”*(29).

The Holy Quran has divided foods, among other things, into two categories: that which is “*Tayib*” (good) and that which is “*Khabith*” (evil or vicious):

*“Those who follow the Apostle, the untaught prophet... [Who] makes lawful to them all the good things and forbids them from all vicious things...”*(Al-Araf 157).

Therefore, the Holy Quran has made permissible the consumption of food which is wholesome and good, while forbidding that which is unfit for human consumption. By classifying certain things as inherently *Najis* (ritually impure – e.g. swine) and others as *Tahir* (ritually pure – e.g. cattle), Islam has outlined which animals we should interact with and benefit from. In doing so, it has protected man’s body and spirit from becoming polluted.

8) For the sake of public health, social interaction as well as travel and transportation between various cities and countries should be monitored and managed.

Muslims should be conscious of the bonds they form (e.g. through marriage) and their manner of social interaction with others. In other words, it is not advisable to maintain a close bond with those whose values do not conform to the message and ideals of the Holy Quran. As was already discussed at length, such individuals are suffering from spiritual ailments and may even be resistant to Divine values. Therefore, it is not spiritually healthy to freely interact with them unless we abide by a carefully calculated code of conduct.

### Conclusion

In the end, it is important to consider the following rulings in Islamic jurisprudence:

- It is forbidden for Muslims to marry disbelievers (*Kuffar*).

- In marriage, if a spouse commits apostasy (*Irtidad*), the marriage is annulled and the couple must separate.

- Those who are not People of the Book as regarded as *Najis* (ritually impure)(Al-Tawbah 28).

- It is necessary to gain proximity from those who are misguided or fabricate religious innovations (*Bidyah*).

These laws and principles are in place in order to create a healthy system of interaction between Muslims and non-Muslims, that is, People of the Book, disbelievers who are not among the People of the Book, *Zhimmi* disbelievers, *Harbi* Disbelievers, those who are misguided, and those who fabricate religious innovations (Table. 3).

**Table 3: Methods of Combating Drug Resistance in the Physical Realm and Combating Drug Resistance in the Spiritual Realm**

Methods of Combating Drug Resistance in the Physical Realm	Methods of Combating Drug Resistance in the Spiritual Realm
Eliminating the cause of infection (i.e. bacteria, fungi, parasites, viruses).	Eliminating the cause of infection: Seeking refuge in the remembrance of God eliminates the presence of <i>Shaytans</i> , a great source of spiritual illness, within one’s spirit: “We assign a devil to be the companion of him who turns a blind eye to the remembrance of the All-beneficent.” (Al-Zokhrof 36)
Eliminating the cause of drug resistance. (This topic has been discussed within the article at length.)	Eliminating the cause of drug resistance. (This topic has been discussed within the article at length.)
Continuously monitoring microbial resistance and gaining sufficient knowledge on how different microorganisms resist various drugs. It is also pertinent that the extent, severity, and different types of drug resistance be determined.	Continuously monitoring resistance: Regardless of the kind of resistance, we must first become fully aware of the circumstances surrounding a person’s illness prior to treating them. The circumstances unique to each patient may include, but are not limited to: their state of mind, their particular form of resistance, the degree of resistance, and the causes and inclinations of that resistance. Potential treatments may include: encouraging <i>Istighfar</i> (asking forgiveness), sharing wisdom, providing counsel, conveying words of depth and eloquence, showing sympathy and care, and winning their heart through kindness.
Establishing laboratories that are capable of quickly determining the causes of illness as well as identifying drug resistance.	Establishing laboratories that are capable of quickly determining the causes of illness as well as identifying drug resistance: Divine trials and tests are the “laboratories” which assess a person’s spirituality and spiritual resistance. [Reference: . [(Al-Ankabut 3) & (Al-Tawbah 126)]
Administering quality drugs which are appropriate for that given illness.	Administering quality drugs which are appropriate for that given illness: In some scenarios a person may require giving hope, while in others a sense of concern and fright should be conveyed. Some circumstances may necessitate reprimanding the individual, while others may call for forgiveness. At times, financial and material assistance should be provided. In some cases, a person should be granted freedom, while another may require limitations of certain freedoms. These are just some examples of actions that may be necessary in treating a spiritually ailing heart of its resistance.
The pharmaceutical industry should focus on developing drugs that are capable of combating resistant microorganisms.	Developing modern drugs which are capable of combating immorality and vice: “We did not send any apostle except with the language of his people, so that he might make [Our messages] clear to them.” (Al-Ibrahim 4) In face of modern spiritual resistance, it is necessary that the spiritual medication of the Holy Quran and the Ahlal-Bayt (Áa) be administered in a manner suitable to this day and age. Therefore, the Divine message should be delivered in a contemporary manner that is both relevant and appealing to the audience. Other important points to be considered are the environment and social atmosphere in which religious teachings are to be taught.
Increasing oversight in the food industry where animals (such as cattle, poultry, and even honey bees) are provided antibiotics. If these antibiotics are administered without just cause, they will be indirectly transmitted to humans who consume these animals and their products. This too results in an indirect form of drug resistance.	Increasing oversight in the food industry where animals (such as cattle, poultry, and even honey bees) are provided antibiotics: In the spiritual realm, negative traits such as diminished <i>Ghirat</i> , hardening of the heart, wretchedness, viciousness, etc. are negative attributes that are transmitted to the human body through the consumption of animals and animal products that are forbidden under Islamic law.
For the sake of public health, social interaction as well as travel and transportation between various cities and countries should be monitored and managed.	For the sake of public health, social interaction as well as travel and transportation between various cities and countries should be monitored and managed: The following rulings are established in Islamic jurisprudence: - It is forbidden for Muslims to marry disbelievers ( <i>Kuffar</i> ). - In marriage, if a spouse commits apostasy ( <i>Irtidad</i> ), the marriage is annulled and the couple must separate. - Those who are not People of the Book as regarded as <i>najis</i> (ritually impure). (Al-Tawbah 28) - It is necessary to gain proximity from those who are misguided or fabricate religious innovations ( <i>Bidian</i> ). - It is mandatory for to leave gatherings which promote sin and deviance. Because such individuals are suffering from spiritual ailments and may even be resistant to Divine values, it is not spiritually healthy to freely interact with them unless we abide by a carefully calculated code of conduct. These laws and principles are in place in order to create a healthy system of interaction between Muslims and non-Muslims.

## References

1. Elahi QM. Holy Quran. Qom: Darol Saqalin Pub; 2002.
2. Dashti M. Nahjol-Balagheh. Nameh 31/93, Imam Ali (AS). Third ed. Qom: Cultural Research Institute; 2002. P.380. [Persian]
3. Horr Ameli Sh. Vasayelo-Shiea. Second Edition. Qom: Tebyan pub; 2003.P.630. [Persian]
4. Majidi GhH. Nahj Alfsahh. First Edition. Qom: Ansarian pub; 2000. P.320. [Persian]
5. Sharafkandi AR. Ibn Sina, law. Fourth Edition. Tehran: Soroush pub; 1997. P.366-367. [Persian]
6. Tabatabaei SM. Alhavy short book. Mashhad: Mashad Univ Med Sci pub; 2009. P.198. [Persian]
7. Kulayni S. Al-Kafi. Tehran: Darolkotob pub; 1986.P.627. [Persian]
8. Zahni Tehrani SMJ. Ellalu-Alshray, Sheikh Sadough. Qom: Darol-Saqalin Pub; 2005.P.543. [Persian]
9. Mardani M. Approaches to Treat Patients Infected with Multi-Drug-Resistant *Acinetobacter baumannii*. Arch Clin Infect Dis. 2013;8(1):1-2.
10. The Nightmare of Drug Resistance Poses Global Health Threat, Doctors Without Borders website, <http://www.pezeshk.us/?p=26486>.
11. WHO, Global Strategy for Containment of Antimicrobial Resistance, Geneva, World Health Organization, WHO, 2001, (WHO/CDS/CSR/DRS/2001.2).
12. Heymann DL. Resistance to Anti-Infective Drugs and the Threat to Public Health. Cell. 2006;124(4):671-5.
13. WHO, Antimicrobial Resistance, 2013. Available From: URL (<http://www.who.int/mediacentre/factsheets/fs194/en/>).
14. Weber JT, Hughes JM. Beyond Semmelweis: moving infection control into the community. Annals of internal medicine. 2004;140(5):397-8.
15. Laxminarayan R, Duse A, Wattal C, Zaidi AK, Wertheim HF, Sumpradit N, et al. Antibiotic resistance-the need for global solutions. The Lancet Infectious diseases. 2013;13(12):1057-98.
16. Naraq MA. Mearajo-Saadah. Qom: Hajrat Publication Institute; 1997. p.65.
17. Holy Quran. Al-Yunus 57. Qom: Amir al Momenin Pub; 2007.
18. Kulayni S. Al-Kafi. Tehran: Darol-Kutub Islami Pub; 1986. p.627.
19. Raghieb Isfahani HBM. Al-Mufradat. Tehran: Al-Maktab al-Murtazayah; 1953. p.404.
20. Naraq MA. Mearajo-Saadah. Qom: Hajrat Pub; 1997. p.309.
21. Raghieb Isfahani HBM. Al-Mufradat. Tehran: Al-Maktab al-Murtazayah; 1953. p.405.
22. Fayz Kashani M. Al-Safi Tafsir. Tehran: Maktabah al-Sadr; 1994. p.93.
23. Naraq MA. Mearajo-Saadah. Qom: Hajrat Publication Institute; 1997. p. 679.
24. Jawadi Amoli A. Tasnim Interpretation. Qom: Israh Pub; 2007.p.231.
25. Jawadi Amoli A. Mafatial-hayah. Qom: Israh pub; 2013.p.135.
26. Dashti M. Nahjol-Balagha, Sermon 108. Qom: Israh Pub; 2002.P.140-322. [Persian]
27. Dashti M. Nahjol-Balagha, Sermon 222. Qom: Israh Pub; 2002.P.322. [Persian]
28. Johnson C. Red meat: less is better?, published 11/04/2013. Available from: [http://www.abc.net.au/health/thepulse/archive\\_2013.htm?\\_page3](http://www.abc.net.au/health/thepulse/archive_2013.htm?_page3).
29. Shaykh Saduq ABJ. Eillal al-Sharari; Translated and researched by Sayyid Muhammad Jawad Zihni Tehrani, Vol. 2. Qom: Muminin Pub; 2004. P.543.