



## IMMUNIZATION: A NECESSITY, OR A PROHIBITION FOR MUSLIMS?

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### ABSTRACT

Immunization is one of the internationally recognised medical preventive measures against a number of diseases. It is undertaken under the auspices of International Organizations like the World Health Organization (W.H.O.), many national governmental health departments and agencies. Various methods are employed by medical experts for its execution, which are so far yielding positive results for eradication and minimizing spread of some diseases. However, in the contemporary period, some Muslims are not agreeing for either themselves or members of their families to be immunized, considering it to be a deviation from one of the articles of faith of their religion. This line of thinking or attitude has to be reconsidered because there is no conflict between the teachings of Islam, medical researches and their applications. Therefore Muslims with the above mentioned line of thinking are required to study the physiology of human body with regards to interactions between it and vaccines administered for various forms of immunization, so as to realize the Wisdom of Allah (SWT), their Creator, Sustainer, Protector and Healer. This would serve as a motivating awareness, possibly for them to change their earlier position of rejecting immunization.

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### INTRODUCTION

Medical practice is as old as the history of mankind. It was conducted at different periods of time and varies with levels of development of human civilizations, from the ancient time when crude methods and substances were employed, to the contemporary period characterised with application of sophisticated but easier and more accurate methods, among which is administration of various forms of immunization in countries all over the world. That notwithstanding, some Muslims in the so called third world nations are not complying with execution of immunization against diseases, either on their own selves or members of their families. Perhaps this attitude might be due to lack of adequate knowledge on interactions between immunization of vaccines and the human body's defence mechanism. It is on this background that this article attempts to highlight on issues related to immunization of diseases such as meanings of immunity and immunization, diseases being immunized, the process or system of immunization within the human body, methods employed for

immunization and Islamic viewpoint on the concept. At the end, a position was taken on whether immunization is necessary or prohibited for Muslims.

### Concepts of Immunity and Immunization

Immunity was defined as all physiological mechanisms that endows an animal with the capacity to recognize foreign materials within itself and to neutralize, eliminate or metabolize them with or without injury to its own tissues (1). Thus, in order to be immune there should be intrusion of an alien substance, specifically disease producing organism (active or deactivated) within the human body for responses to occur. At the end of relative resistance of the host (the human body), a person would become immune to re-infection by any other similar microbe (disease producing organism) in future life. Immunisation on the other hand is the administration of antigens (2) in the human body for the purpose of inducing immunity. (Livingstone, 1999)

**Types of Immunity:** Immunity has been classified into two types, active and passive. Active immunity occurs as a result of a person's body response to an antigen and production of its

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own antibodies for long lasting resistance, while passive immunity occurs by introducing antibodies to an individual produced by someone else. However, overtime the antibodies produced in passive immunity may break down, thus it may function briefly (Ross and Wilson, 2014). Furthermore, both active and passive immunity could be naturally or artificially acquired.

**Active Naturally Acquired Immunity:** This occurs as a result of infection of a disease and curing from it. During the course of illness the blood develop plasma cells that produces antibodies in large numbers to combat the infection. After recovery the new cells produced confer immunity to future infection of the same antigen (5).

**Active Artificially Acquired Immunity:** This is induced by administration of dead or alive artificially weakened pathogens (immunization vaccines or de-activated toxins) in the human body. As a result, they stimulate development of immunity without causing the disease. Examples of diseases preventable by artificial immunisation are Measles, Smallpox, Poliomyelitis and Tuberculosis (6).

**Passive Naturally Acquired Immunity:** This is acquired by a baby from the mother in the womb before birth, whereby maternal antibodies are passed across the placenta to the foetus, and subsequently to the baby in breast milk after birth. This type is also short-lived because the baby's lymphocytes are not yet developed and stimulated (7).

**Passive Artificially Acquired Immunity:** This is acquired by injection of "ready made" antibodies from a man or an animal that has recovered from an infection, immunization of vaccines or specific anti-serum to prevent development of disease in people who had been exposed to infection such as rabies, or as a treatment after the disease has developed (8).

### Immunizable Diseases

History of vaccine development for immunization was traced in 1796 when a scientist called Edward Jenner inculcated a cowpox vaccine to a child ([http://en.wikipedia.org/wiki/small\\_pox](http://en.wikipedia.org/wiki/small_pox)). Further developments continued in this direction by other medical scientists worldwide, up to the formation of the World Health Organization (WHO), which is now an international forum for formations of global policies on immunization from year 2000 to date. Examples of such policies is the Expanded Programme on Immunization (EPI) earmarked to make vaccines available to children all over the world ([www.who.int](http://www.who.int)). Currently, diseases being immunized to children and adults worldwide includes Measles, Mumps and Rubella (coined as MMR), Diphtheria, Pertussis (Whooping Cough) and Tetanus (coined as DPT), Poliomyelitis and Small pox. Others are Yellow fever, Varicella (Chickenpox), Rotavirus, Influenza, Meningitis, Dengue fever, Rabies, Typhoid Fever, Cholera and Hepatitis A, B, E. Research is also ongoing for possibility of immunization against Malaria (11).

### Methods of Immunization

Immunization is administered in the human body via some routes/paths by which a vaccine (or drug) is brought into contact with the body for the substance to be transported from the site of entry (administration) to the part of the body where

its action is desired ([Training.org/route-of-administration.htm](http://Training.org/route-of-administration.htm)). Some of the current routes for administration of vaccines are injections, oral intake (mouth) and intranasal spray. Some vaccines are also administered by subcutaneous injections (SC), that is into the subcutaneous layer of the skin, which is above the muscle and below the skin, examples are those of Measles, Yellow fever. and Smallpox. Some are administered by inter-dermal (ID) injection, that is in the topmost layer (superficial) of the skin, such as that of Tuberculosis Bacillus (BCG). Others are introduced through intra- muscular (IM) injections in the deltoid muscle or any muscle of the limb, such as some Polio vaccines, Haemophilus Influenza B (HIB) and Tetanus Toxoid (TT). Oral administration is used for Rotavirus and Poliomyelitis (OPV) vaccines while intra-nasal route is used for spraying of Flu Vaccine (13).

### System/Process of Immunization

The process or system of immunization is one of the signs (ayāt) of wisdom (hikmah) and mercy (rahmah) of Allah (SWT) (14) the divine creator of mankind. It is a function of some components of blood cells in the human body. Blood is a red coloured connective fluid tissue which is circulating constantly in the body allowing communication between all tissues near or distant from each other. It transports oxygen, water, red and white cells, platelets, nutrients (end products of nutrition), hormones, heat, protective substances, gases and waste materials. All these are flowing in a yellowish fluid called plasma (Ross and Wilson). The blood plasma also contains plasma proteins which generates osmotic pressure of the entire blood. These proteins includes Albumins, Globulin, Fibrinogen (formed in the liver) and Immunoglobulin. Globins and immunoglobins (produced by lymphocytes) (16) plays important role in immunity by functioning as antibodies. They bind to, neutralize (kill) foreign materials (antigens) such as micro-organisms introduced in the body. (17) Thus, the white blood cells in the human body are the principal actors functioning for defence against infections and providing immunity of diseases. They detect foreign and abnormal materials and destroy them (18). White blood cells composes of Neutrophils, Eosinophils and Basophils.

It is the Neutrophils which are called "scavenger cells" that are attracted in large numbers to an infected area, where they engulf and kill bacteria by releasing certain enzymes in a process called "phagocytosis" (19). Majority of lymphocytes in the human body are found in the lymph nodes and the spleen. They constitute about 20-30% of circulating white blood cells. They include "T" and "B" cells which are involved in immunological surveillance (detection). It was detected that each mature "T" cell recognises only one type of antigen (disease producing organism) and reacts only on it during its circulation throughout the body. They are greater in number than "B" cells. Thus, a "T" cell that recognises and attack Measles virus will not attack Chickenpox virus, Cancer, cells of tuberculosis bacterium. Likewise, each "B" cell (which is produced in the bone marrow) bind and destroy only one type of antigen (20). These types of lymphocytes are called Natural Killer (NK) cells because they are constantly patrolling within the human body in the blood circulatory system searching for antigens and killing them (21). In view of the above mentioned explanations it could be understood that whenever any type of immunization stated in section 2 of this write-up, especially with regards to artificial immunization (2.1.2) which this article is specifically concerned with, after

administration of any immunizable antigen like those of Measles, Smallpox, Polio and TB to a person, specific “T” and “B” cells would be created to fight and kill it, and would permanently remain within the blood circulatory system of the person for life acting for surveillance, phagocytosis and killing of any other invasion of the same antigen. By implication, immunization is an inbuilt system already established within the systems of the human body provided and maintained by our Creator Allah (SWT) as a defence mechanism against infections, because of His Mercy (rahmah) which covers all his creations. Therefore administration of immunizable agents are only serving as stimulants for the system or process of immunity to occur within the body, not the immunized agents themselves.

### Islam and Immunization

There is no direct injunction from the primary sources of Islam on the practice of immunization because it happened to be a later development within the scope of medical sciences. Since immunization is concerned with preventive measures, some relevant indications could be cited from the sources of Shari’ah (22) in support of, or against it. In this regard, some reports of sayings of the Prophet of Islam could be cited and commented upon. In a Hadith (23) Abdullahi Ibn Masud (RA) (24) reported that the Messenger of Allah (SAW) (25) said: “verily, spells, amulets and charms are acts of idolatory”. (26) Uqbah Ibn Amir (RA) reported that the Prophet (SAW) said: “whoever hangs an amulet around his neck, then Allah will not fulfil his wishes. Whoever hangs a seashell as a charm, then Allah will not leave him without penalty” (27). In another Hadith, Imran Ibn Hussein (RA) reported: the messenger of Allah (SAW) saw a man wearing a brass ring, so he asked what it was. The man said it was a protection from arthritis. The Messenger of Allah (SAW) then said: Remove it, for it will only increase your arthritis, and if you were to die wearing it, you would never be successful (28). In all the three ahadith (plural of hadith) quoted above, it could be noted that the Prophet (SAW) prohibited for Muslims to rely on hanging of any object like an amulet, seashell or ring on the body or any place for the purpose of protection against calamities or diseases. Implication of the above prohibitions is that relying on hanging of objects for protection contradicts with monotheism of Allah in Islam, who is the only deity worthy of worship, upon whom all needs and protection of mankind are to be sought. In other direction, one of the companions of the Prophet Muhammad (SAW), Abdullah Ibn Amir reported that Umar Ibn Al-Khattab (RA) the second successor of the prophet in Muslims leadership commenced a journey to Syria.

**When he reached the town of Sargh he was informed that an epidemic was prevalent at Syria. Abdul Rahman Ibn Awf then told him a hadith of the prophet (SAW) thus:**

“when you hear an epidemic (29) in any place, do not go there, and if the epidemic should start in the place where you are, do not flee from it” (Muwatta Imam Malik, 2015). On hearing that, Umar Ibn Al-Khattab (RA) returned back to Madinah (31). This hadith indicates for one of the preventive measures taught by the prophet of Islam, specifically stopping an individual or a group of people to travel from a healthy area to another place where a disease is confirmed to become an epidemic, or to travel from his own place where there is an epidemic to a healthy area so as not to spread the epidemic disease of his original place.

### Position of this Paper

Some of the very few Muslims who are showing negative attitude to immunization are capitalizing on the ground of dissociating themselves from Al-shirk (32). Their line of thinking is that all vaccines administered for immunization are serving for the same “wrong” purpose of protection with amulets, charms, seashells or any object hanged on the body, which the Prophet of Islam has prohibited as indicated in the aforementioned ahadith. Further Considering that as a person who believes that so long as charms or amulets are on his body or any place around him, he will not be affected by any disease or calamity, which is an act of associating such objects with the qualities of the Allah (SWT) the Creator, Sustainer and Protector of all His creations, a person who accepts that immunization of vaccines within his body for protection against diseases is similar to using charms, which is contrary to the fundamental belief of Al-tawhid (33) for Muslims.

### This is a wrong perception, on the following reasons

- Amulets, charms or any object fixed on the body or any place are stationary (fixed) and inactive, but wrongly believed to have protective powers by their users, whereas:
- Vaccines used for immunization are suspensions or live products of infectious agents administered within the body to stimulate production of antibodies which would serve for attacking and killing any other similar disease producing organism that may intrude the human body.
- Human body’s defence mechanism is among the essential functions of the blood (specifically the white blood cells) which Allah (SWT) has created and ordained to be occurring continuously in life as he wishes. Therefore immunization of vaccines, suffering from some diseases and curing from them or pre-natal transfer of antigens are stimulants for activation and acquisition of immunity. This was explained in section 2 (Types of immunity) and section 5 (System/process of immunization) of this article.

Therefore immunization against infections of diseases is necessary for Muslims. It should not be regarded as a prohibition.

### Conclusion

All Muslims believe that Allah (SWT) Created man and bestowed him with the best physical structure (34). In addition to that, within the scope of His infinite Mercy which covers all His creations, He provided and sustains several interconnected systems which governs the life survival of every human being. Within this scope is the blood circulatory system, wherein the white blood cells (thrombocytes) serves for defence mechanism against infections of diseases by working constantly for surveillance of disease producing micro-organisms, attacking and killing them unless they are overpowered, whereby medical treatment is to be resorted to. This process or activity also occurs whenever antigens and vaccines are immunized, after which the killer cells produced remain within the body to attack and render any similar organism harmless to the body. In view of all what was highlighted in this article both in Islamic and scientific aspects, it could be realised that immunization is not similar to usage of

charms and amulets for protection, which is a form of polytheism prohibited for Muslims. Therefore Muslims who are resistant to immunization should debunk from their idea and now accept it wholeheartedly, so long as vaccines and antigens to be administered are tested in medical laboratories and confirmed to be genuine and harmless.

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5. Ibid, p.382
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12. [Training.org/route-of-administration.html](http://Training.org/route-of-administration.html), Retrieved on 22/03/18.
13. Ibid.
14. SWT-Abbreviation for the Arabic words Subhaanahu Wa Ta'aalaa, which means the Glorified and Most High, a praise to Allah by Muslims whenever His name is mentioned.
15. Ross and Wilson, Anatomy and Physiology in Health and Illness, opcit, pp.62-63.
16. This is one of the types of white blood cells.
17. Ross and Wilson, opcit.
18. Ibid, pp.67-68.
19. Ibid, pp.68-69.
20. Ibid, pp.379-381.
21. Ibid.
22. Shari'ah means Islamic Law and Jurisprudence.
23. Hadith means records of sayings, actions and silent approvals of the prophet of Islam, Muhammad (SAW).
24. "RA" is abbreviation of Arabic words transliterated as Radiyallahu Anhu, meaning may Allah be pleased with him, applicable to any companion of Muhammad the prophet of Islam whenever his name is mentioned.
25. "SAW" is abbreviation of the Arabic words transliterated as Sallallahu Alaihi Wa Sallam, meaning Peace and Blessings of Allah be upon him, which is a salutation to Muhammad the prophet of Islam by all Muslims whenever his name is mentioned.
26. Sunan Abu Dawud, 2008. English Translations, Darussalam Publishers and Distributors, Riyadh, Saudi Arabia, hadith no.3883.
27. Musnad Ahmad Ibn Hambal, 2012. English Translation, Dar-us-salam Publication, hadith no.16951.
28. Ibid, hadith no. 19498.
29. An epidemic is a disease which is affecting many people at a time in a particular environment.
30. Muwatta Imam Malik, 2015. Diwan Press, Hadith no.1593, p.779.
31. Ibid.
32. Al-shirk as a concept in Islam means polytheism, that is associating Allah with any other diety in worship.
33. Al-tawhid, means worshipping only one diety. In Islam it means worshipping Allah alone.
34. Qur'an, Ch.95:4

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