

## Offense of Spreading Infectious Disease and Methods of Proof Through Forensic Science

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### ABSTRACT

Since 1988, a specific Act has been enacted concerning the prevention and control of infectious diseases. This Act is known as the Prevention and Control of Infectious Diseases Act 1988. The preamble to this Act states that it was enacted to amend and consolidate laws relating to the prevention and control of infectious diseases and to provide for other matters relating thereto. In this Act, there are several types of actions that if committed can be convicted as an offense under this Act, among them include acting in a manner that can spread infectious diseases. This study discusses matters related to offense causing the spread of infectious diseases from the view of civil and Syariah law. It also covers scientific methods to prove such offense. This qualitative study has collected relevant data through primary and secondary documents and subsequently analysed it using the document analysis method. The result of this study found that the act of exposing others to the risk of infection is an offense and it is forbidden in Islam. Several scientific methods can be used in convicting this offense; among them are medical reports, travel records, physical examinations, CCTV footage, and biological examinations. This study suggests that the aspect of proof for such cases should be emphasized because such studies have not yet been conducted by previous researchers.

**Keywords:** COVID-19, Spreading infectious diseases, Prevention and Control of Infectious Disease Act 1988, Fiqh Forensics, Scientific evidence

## Introduction

There are several legislations and subsidiary legislations that are in force and applicable in confronting the pandemic COVID-19 in Malaysia. Among it is the Prevention and Control of Infectious Diseases Act 1988 [Act 342]. This Act has been enacted since 1988 concerning the prevention and control of infectious diseases in Malaysia. The preamble to this Act states that it was legislated to ameliorate and amalgamate laws relating to the prevention and control of infectious diseases and to provide for other matters relating thereto. This Act applies throughout the country, to all Malaysians and also domiciled or residing in Malaysia at the time it came into force.

Recently, on 9<sup>th</sup> June 2020, the First Schedule of Act 342 was amended to insert paragraph 3A, after paragraph 3, the word “Coronavirus Disease 2019 (COVID-19)” (Baba, 2020). This indicates that Act 342 has recognized COVID-19 as one of the infectious diseases. Furthermore, following this recent amendment, the Act 342 shall be applied in handling issues and matters related to pandemic COVID-19. It is an important Act for COVID-19 as it contains procedures and means of prevention and control of infectious diseases that need to be implemented.

Since the implementation of the Movement Control Order (MCO) in Malaysia which was started on 18 March 2020 (Khor, Arunasalam, Azli, Khairul-Asri, & Fahmy, 2020; Tang, 2020), there have been several reports of violations of orders that have been issued by the authorities. Most of the reported offenses were related to non-compliance with quarantine orders, the use of face masks, and standard operating procedures during the Movement Control Order. However, to this day, there is still no offense in committing any act that could spread infectious diseases reported in the social or mass media.

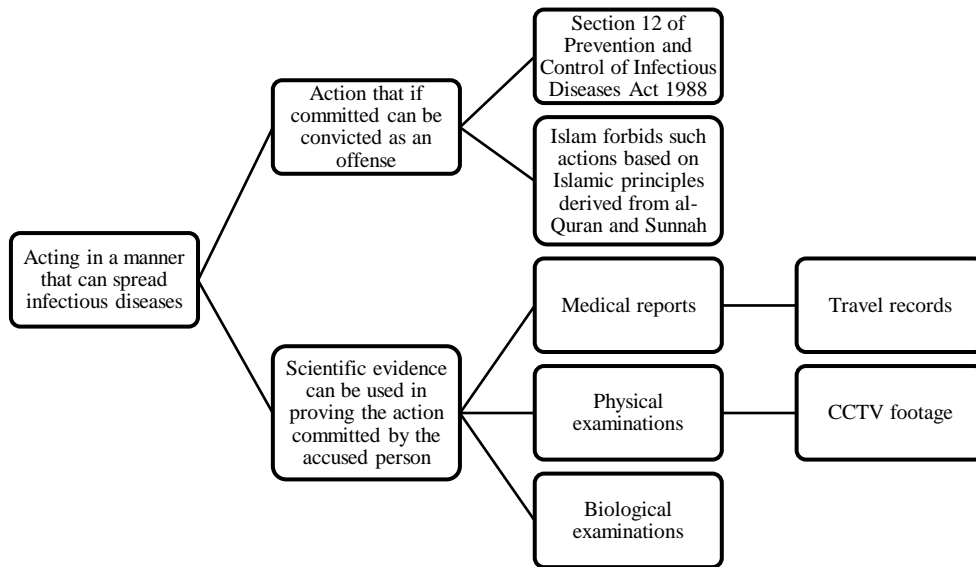
This study will discuss the offense of committing any manner that can be deemed to be spreading infectious diseases to the public or exposing them with the risk of infection. This study also suggests several methods of proof through forensic science that have the potential to be used in the conviction of such offense.

## Research Methodology

This qualitative study has collected the relevant data through primary and secondary documents. This process, as referred by Merriam (2009), is known as “mining data from document”. Using documentary material as data is not much different from using interviews or observations (Glaser & Strauss, 2006; Merriam, 2009). The nature of documents can be primary or secondary; it depends on the source of the document being obtained. If the document is collected afresh for the first time and original, then it is a primary document taken from primary source. Meanwhile, when the document is collected by someone else and which have already been passed through the statistical or analytical process, then it is a secondary document taken from secondary source.

The data collected were subsequently analysed it using the document analysis method. Bowen (2009) has elucidated that document analysis is a form of qualitative research, where documents are interpreted by the researcher to give voice and meaning around an assessment topic. Furthermore, analysing documents incorporates coding content into themes similar to how focus group or interview transcripts are analysed (Bowen, 2009; Merriam, 2009). Its primary purpose is to educationally evaluate particular written documents (Payne & Payne, 2004; Walsh, 2014). Document analysis is an important research and should be utilised by social scientists with full confidence (Ahmed, 2010). It enables us to learn from activities of the past and to put the lessons learned into practice for the benefit of social learners (Walsh, 2014). This approach also can be used either as complementary or stand-alone research methodology (Bowen, 2009; Chinedu & Mohamed, 2017). As for this research, it is utilised as a stand-alone research method for appraising the application of forensic science principles in the Islamic primary documents.

## Findings



**Figure 1: Offense of spreading infectious disease and means of proving through forensic science**

The result of this study found that the act of exposing others to the risk of infection is an offense and it is forbidden in Islam. Several scientific methods can be used in convicting this offense; among them are medical reports, travel records, physical examinations, CCTV footage, and biological examinations.

## Discussion

The evidence needed in the case is that it can prove at least two things, namely the presence of the accused in a public place and the accused is being infected with an infectious disease. The first thing can be proved by the testimony of the witnesses who were at the scene. However, the second thing is not enough to be proven by the testimony of witnesses alone. It requires other methods of proof that can prove or substantiate existing evidence. Forensic science is seen as potential evidence to be used in proving this offense.

### 1) Offense of spreading infectious disease in civil law

In general, 10 types of offenses have been provided for in the Prevention and Control of Infectious Diseases Act 1988 which can be seen in Table 1 below.

No.	Prevention and Control of Infectious Diseases Act 1988	Offences
1	Section 3	Failure to maintain the confidentiality of all matters that come to his knowledge in performing his official duties
2	Section 8	Failure to make any preparations required by the authorized officer for the inspection to be carried out.
3	Section 9	Bringing any corpse, human tissue, any organism, pathogenic substance, or any part thereof into or out of Malaysia
4	Section 10	Failure to notify about the existence of infectious disease when the person knows about the existence of such disease
5	Section 11	Disobeying the directions of an authorized officer in an infected local area
6	Section 12	Infected persons act in a manner likely to spread infectious disease
7	Section 13	Giving, lending, selling, transmitting, using, or exposing any goods or animal that have been infected or contaminated without prior disinfection.
8	Section 17	Burial or cremation of a person who has died or is suspected to have died as a result of an infectious disease without following the instructions of an authorized officer
9	Section 20	Selling or letting contaminated buildings
10	Section 22	General offences

**Table 1: Offences under the Prevention and Control of Infectious Diseases Act 1988**

The persons who commit such offences on Table 1 above shall be liable to the penalties prescribed under Sections 24 and 25 of the Prevention and Control of Infectious Diseases Act 1988 as follows:

- a) 1<sup>st</sup> offence: Imprisonment term not exceeding 2 years, or fine, or both.
- b) 2<sup>nd</sup> or subsequent offence: Imprisonment not exceeding 5 years, or fine, or both.
- c) Continuing offence: A further fine not exceeding RM200 every day which such offence continues.
- d) Director-General or any public officer authorized for this purpose may compound any offence under this Act, which has been prescribed by regulations as compoundable, by collecting from offender a sum of money not exceeding RM1,000.

Based on Table 1, the offense related to this study is provided under Section 12 in which the offense of committing any manner that likely to spread infectious diseases. Meanwhile, Subsection 12 (1) has provided for the following:

*“No person who knows or has reason to believe that he is suffering from an infectious disease shall expose other persons to the risk of infection by his presence or conduct in any public place or any other place used in common by persons other than the members of his own family or household.”*

The Subsection above clearly shows that the act of exposing others to the risk of infection is an offense under Malaysian law. Analysis of the above provision shows that it contains two basic elements in proving an offence, namely *actus reus* and *mens rea*. In this Subsection, the *actus reus* is exposing other persons to the risk of infection by his presence or conduct in any public place. Meanwhile, the *mens rea* is the actual or constructive knowledge that he is suffering from an infectious disease. Both of these

elements of the offense need to be proven so that the person suspected of committing the offense can be convicted of the offense he has committed.

However, some important things need to be taken into account if you want to enforce this Subsection 12 (1). First, if the authorities want to make a charge against the individual involved, how is it to be implemented? This is because the accused is a patient with an infectious disease. Clear standard operating procedures should be implemented to allow the prosecution and judgment can be carried out without exposing people to the disease that is being suffered by the patient. Second, whether the prosecution should be postponed until the patient recovers from the infectious disease or should be continued without any delay. This may depend on the individual's recovery period of COVID-19. The recovery period of coronavirus disease for people with mild disease is about two weeks, while people with severe or critical disease recover within three to six weeks (World Health Organization, 2020). Third, either the accused will be detained in a special lockup or quarantine centre pending the trial date. This is because this detention needs to be implemented to prevent the accused from fleeing and hiding.

## 2) Syariah point of view on the manner of harming others through infectious diseases

Syariah has unambiguous principles related to the prohibition of harming others through infectious diseases. These principles are built based on the injunctions from the Quran and Sunnah to protect the welfare of human beings and to avoid them from any harm that could endanger their lives. Among the following principles is the prohibition of causing harm to others through manners that can spread infectious diseases. This is based on two hadiths that can be combined to produce the principle that the disease is contagious due to the occurrence of contact between the sick and the healthy. This indirectly causes harm to healthy people because they have to suffer from infectious disease.

The first hadith was narrated by Abu Hurairah (r.a.):

حَدَّثَنَا سَعِيدُ بْنُ مِينَاءَ، قَالَ سَمِعْتُ أَبَا هُرَيْرَةَ، يَقُولُ قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ «لَا عَدْوَى وَلَا طَيْرَةَ وَلَا هَامَةَ وَلَا صَفَرَ، وَفِرَّ مِنَ الْمَجْدُومِ كَمَا تَفِرُّ مِنَ الْأَسَدِ».

Narrated Abu Hurairah (r.a.): Allah's Messenger (p.b.u.h.) said, "(There is) no 'Adwa (no contagious disease is conveyed without Allah's permission). nor is there any bad omen (from birds), nor is there any Hamah, nor is there any bad omen in the month of Safar, and one should run away from the leper as one runs away from a lion." [Reported by al-Bukhari, tradition no. 5707]

The second hadith was narrated by Abu Hurairah (r.a.):

عَنْ أَبِي سَلَمَةَ، سَمِعَ أَبَا هُرَيْرَةَ، بَعْدَ يَقُولُ قَالَ النَّبِيُّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ «لَا يُورَدَنَّ مُمْرَضٌ عَلَى مُصِحٍّ».

Narrated Abu Hurairah (r.a.): Allah's Messenger (p.b.u.h.) said: "the owner of sick camels should not take his camels for watering where the owner of healthy camels is present" [Reported by al-Bukhari, tradition no. 5771; Muslim, tradition no. 2221]

According to Ibnu al-Ṣalāḥ (2002), al-Nawāwī (2011), and Ibnu Hajar al-‘Asqalani (2000), it is possible to combine two hadith (for example the both above-mentioned hadith) to bring out some aspect, and direct person’s attention to that aspect and endorse both of the hadith. This needs to be done so that the higher intent of Syariah (*maqasid al-Syariah*) contained in these propositions can be seen and understood more clearly. Based on the above hadith, it can be combining because these diseases are not contagious on its own, but Allah made a person sick with these illnesses coming into contact with a healthy person as a means of infecting the healthy person with his sickness (al-Sakhāwī, 2003; Ibnu al-Mulaqqin, 1992; Ibnu al-Ṣalāḥ, 2002). According to Ibnu Hajar al-‘Asqalani (2013), al-Qādī ‘Iyāḍ (1998), and al-Nawāwī (2011), these hadiths signify the prohibition against a sick person carrying or spreading infectious diseases to other people. Furthermore, this prohibitory injunction is ruled as a precautionary measure to prevent a contagious disease from infecting healthy people that will cause greater harm to mankind.

Furthermore, there’s also proposition that clearly prohibit any person from harming others, either against person’s life, honor, or even his property. It was narrated by Amru bin Yahya (r.a.):

عَنْ عَمْرِو بْنِ يَحْيَى الْمَازِنِيِّ، عَنْ أَبِيهِ، أَنَّ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ لَا ضَرَرَ وَلَا ضِرَارَ

Amr ibn Yahya al-Mazini from his father that the Messenger of Allah (p.b.u.h.), may Allah bless him and grant him peace, said, “There is neither injury nor return of injury.” [Reported by Malik (1985), tradition no. 31]

This hadith is well-known in books of fiqh and other books, and scholars have built a number of rulings and others on it (al-Nawawī, 2010; al-Suyūfī, 2013). Furthermore, the utterance of this hadith is also formulated as one of the Islamic legal maxim (al-Burnu, 2002; al-Zarqā, 2012; Zaydān, 2015). According to Ibnu Mulaqqin (2012), al-Munāwī (2014), Ibnu Daqiq al-‘Id (2003), and Ibnu Hajar al-Haitami (2008), this hadith asserts that Islam forbids Muslim from performing any action that could endanger others in any situation unless there is evidence that allows it. This is because the act of harming others is an act of tyranny, and tyranny is forbidden in Islam. The forbidden act of harming others in Islam is an act that has an absolute adverse effect, although the act comes from acts which originally permissible for one person to do to others (Haydar, 1991; Zaydān, 2015).

As a result of the propositions that have been stated above, it can be clearly seen that the higher intent of Syariah in these circumstances is to prevent mankind from any harm. This includes harm resulting from the transmission of infectious diseases. Furthermore, this also clearly shows that the act of exposing others to the risk of infection is forbidden in Islam.

### 3) Prove the offense scientifically through the methods of forensic science

Evidence through forensic science methods has the potential to be used in this case. The forensic science methods that will be used to prove an offense depend on the types of evidence found on the accused or at the crime scene (Baharuddin, 2017; Baharuddin, Ahmad, Ismail, Mutalib, & Harun, 2019). It can be used to prove the existence of the accused in public places and also to prove that the accused is suffering from or potentially suffering from an infectious disease.

#### a) Medical reports

The medical record usually records all salient information following an often complex and multifaceted interaction (Weiner, Wang, Kelly, Sharma, & Schwartz, 2020). Comprehensive, reliable, and detailed documentation in the medical record is critical to patient care and a physician when any allegations arise (Ngo, Patel, Chandrasekaran, Tajik, & Paterick, 2016; Weiner et al., 2020). The information is utilized to guide future care decisions, to assess and improve the quality of care, and to reimburse for services rendered (Weiner et al., 2020).

The majority of patients with COVID-19 present common symptoms (fever, cough, dyspnoea) and less common symptoms (myalgia, fatigue, sputum production, confusion, headache, sore throat, rhinorrhoea, chest pain, haemoptysis, diarrhoea, and nausea/vomiting) (Baj et al., 2020; Elengoe, 2020; Gennaro et al., 2020; Nguyen et al., 2020).

Medical records are very important in proving the existence of the accused's actual knowledge that he is suffering from an infectious disease (Baharuddin, 2018; Baharuddin, Mutalib, Ahmad, Saharuddin, & Razak, 2019). This is because medical records will state some important information such as result of screening test for suspected COVID-19 symptoms, types of symptoms, and COVID-19 infection status. The assigned officer will inform the patient about the record of the screening test results whether positive COVID-19 or otherwise. This indicates that the patient will know that he or she has an infectious disease.

#### **b) Travel records**

Travel records are important to prove that the accused has either actual or constructive knowledge that he is suffering from an infectious disease. This is proven when the accused's travel record shows that he has travelled to infected areas either inside or outside Malaysia.

If the accused is the returning Malaysian from overseas, then he may obtain actual knowledge. This is because any returning Malaysian from overseas need to undergo continued medical screening and 14-day quarantine (Tang, 2020). This is because in Malaysia, a person was suspected of having COVID-19 based on the history of travel to or resided in a foreign country within 14 days before the onset of disease (Elengoe, 2020). He will eventually receive the result of medical screening for suspected COVID-19 symptoms. If the result is positive, then he is known that he is suffering an infectious disease.

Meanwhile, if the accused is travelling and returning domestically within Malaysia, and it turns out that he visited the infected areas, then he may have the constructive knowledge or reason to believe that he is suffering from the infectious disease. This is because SARS-CoV-2 can spread through both direct means (droplet and human-to-human transmission) and by indirect contact (contaminated objects and airborne contagion) (Han & Yang, 2020; Jayaweera, Perera, Gunawardana, & Manatunge, 2020; Lotfi, Hamblin, & Rezaei, 2020). Because of that, the accused should have reason to believe that he is suffering from an infectious disease because he has travelled to an infectious area.

#### **c) Physical and biological evidence examinations**

Every crime scene has to be treated on an individual basis, having its peculiar history, circumstances, and problems. It also refers to the physical evidence that depends on the type of offense committed. Every offense committed requires its physical evidence and cannot be equated with any other offense.

Among the physical evidence suitable for the offense in this study are clothing, quarantine bracelet, handkerchief, tissues, and face mask that were with the accused. The physical evidence collected does not reveal any suspicion; however, a preliminary examination could be made to screen the presence of biological fluids such as saliva, phlegm, or mucus found, or any other chemical substance like a fingerprint on such physical evidence. If the preliminary examination yields positive results, then further examination will be conducted involving the process of identification and comparison (Saferstein, 2015). Identification is a process to determine the substance's physical, biological, or chemical identity. This process will involve, *inter alia*, determination of substance origin, characteristic of the substance, and the owner of such substance.

Meanwhile, the comparison process refers to the process of ascertaining whether two or more objects have a common origin (Saferstein, 2015). That is, the evidential specimens are compared to the reference specimens to identify whether they came from the same source. If the comparison results

show that both come from the same source, then the evidence is considered to have individual characteristics. According to Saferstein (2015), individual characteristics refer to the properties of evidence that can be attributed to a common source with an extremely high degree of certainty. For example, the fingerprints and body fluids such as saliva and sweat, all come from the common source which is the accused person.

Also, specimens taken from physical evidence such as body fluids in the form of sweat, saliva, phlegm, and mucus should be taken to a medical laboratory to undergo a COVID-19 screening test. At the same time, the suspect will also be subjected to a COVID-19 screening test; the test result will be used as a reference to the questioned sample that we can get from the evidence. A person was “confirmed” COVID-19 positive after performing laboratory tests (Elengoe, 2020). COVID-19 patients can be diagnosed using diagnostic testing kits for the presence of the virus. Imaging techniques such as chest X-ray and pulmonary CT scans can be used to diagnose pneumonia in COVID-19 patients (Elengoe, 2020).

#### **d) Closed-circuit television (CCTV) footage**

Closed-circuit television (CCTV) is a camera that records video images and sends composite video signals to specific places (Ahmad et al., 2019; Wan Ismail, Shukor, Hashim, & Baharuddin, 2018). CCTV footage is used to detect suspects and this process can use both human operators and computer face recognition systems (Ritchie et al., 2018; Wan Ismail, Shukor, Hashim, Mutalib, & Baharuddin, 2019). CCTV footage may be useful in answering at least two of these questions: what happened and who was involved (Ashby, 2017). Good quality footage potentially allows investigators to view the entire incident in detail, provide information on the chronology of the incident, the methods used and the routes taken by the offender, and support or deny other evidence of what happened, such as witness testimony (Seckiner, Mallett, Roux, Meuwly, & Maynard, 2018).

CCTV footage can be used as evidence for a conviction for committing an act that exposes others to the risk of infection. This refers to CCTV footage on the premises that is believed to have recorded the offense. Ashby (2017) states four questions that need to be resolved before the recording can be used for investigative purposes. First, is the CCTV recording recorded successfully? Second, was the recording successfully obtained? Third, does the recording reflect the intended criminal conduct? Fourth, is the recording quality at a satisfactory level to detect the identity of the criminal? If the answers to these questions are at a positive level, then the recordings can be used for investigation purposes.

Evidence from CCTV footage is relevant if it records the presence of the accused at public places or any other place commonly used by people. In addition, it is also relevant if it records the conduct of the accused which is deemed to expose others to the risk of infection (Kementerian Kesihatan Malaysia, 2020).

#### **Conclusion**

In conclusion, committing an act which may be deemed to be contagious is considered an offense under Subsection 12 (1) of the Act. However, some things need to be taken into account if you want to enforce this subsection because it involves the accused who is infected with an infectious disease such as COVID-19. If not implemented according to a clear SOP, it can cause harm to various parties and the public. In proving such an offense, the testimony of witnesses at the scene is very helpful in proving the existence of the accused in a public place. However, this evidence is not enough to prove that the accused is suffering from an infectious disease. To make up for this shortcoming, other evidence such as scientific or forensic science is needed to prove that the accused is suffering from an infectious disease and also supports the testimony of witnesses that the accused is indeed in a public place. Among the scientific or forensic science evidence that this study considers potential to be used in proving the offenses being studied are medical reports, travel records, physical and biological evidence examinations, and CCTV footage.



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