AUCTORES
Globalize your Research

Clinical Medical Reviews and Reports

Iqbal Akhtar Khan*

Open Access

Review Article

Air Travelers with Disabilities: A Growing Population: Expectations versus Reality

Iqbal Akhtar Khan

Independent Scholar, Lahore-54792, Pakistan.

Corresponding Author: Iqbal Akhtar Khan, Lahore, Pakistan.

Received Date: January 27, 2022; **Accepted Date:** February 16, 2022; **Published Date:** March 18, 2022

Citation: Iqbal Akhtar Khan (2022) Air Travelers with Disabilities: A Growing Population: Expectations versus Reality J, *Clinical Medical Reviews and Reports*. 4(5); DOI: 10.31579/2690-8794/123

Copyright: © 2022, Iqbal Akhtar Khan, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

With the tremendous growth in air traffic worldwide (4.5 billion in 2019), the number of air passengers, with disabilities, is also increasing. As a result, their needs and expectations are also on rise. The international law strictly prohibits discrimination on the basis of their disability and gives them equal rights like able-bodied citizens, of free movements including air travel. Unfortunately, it is a melancholiac reality that they are still experiencing discriminatory treatment at airports and on-board. The majority of the complaints of dissatisfaction and displeasure, from them relate to sub-optimal accommodations at airport and in-flight assistive devices and, at occasion, of being subjected to humiliation and physical suffering. The magnitude of the problem necessitates that the task of addressing their legitimate needs be delegated to decision makers with the skills and authority to enforce the exiting legislature. This paper is aimed at highlighting the problems of the air travelers with disabilities, with updated protocol and guidelines on relevant technical and legal issues. Whereas the list of disabilities is long and exhaustive, the present review is limited to those with mobility and breathing problems only.

Key words: air travel, people with disabilities, discrimination, medical clearance, disability specific legislature

Introduction

"*Traveling by plane can be stressful for anyone—the long wait, the security hassles, lost luggage. But the process can be even more grueling for people with disabilities"* [1]

It has been reported by International Civil Aviation Organization (ICAO) that 4.5 billion passengers flew in 2019 [2]. Alexandre de Juniac, Director General and CEO of The International Air Transport Association (IATA), while releasing the performance figures remarked "*Airlines are connecting more people and places than ever before. The freedom to fly is more accessible than ever "*[3].

Whereas the enhanced connectivity and familiarity has caused more septuagenarian and octogenarian to fly more often than previous generations, the increase in aging flyers means also an increase in potentially vulnerable (even in the absence of overt disease) aboard aircraft. It is known that there is a close correlation between disability and age, two thirds of disabled people being elderly [4].

Although, the vast majority of potential air travelers are people who either are healthy or have no reason to think they are not, the Fifth Report entitled. "Air Travel and Health", by the Select Committee of House of Lords United Kingdom makes it clear that "*it is not realistic to require airlines to accept as passengers everybody who might wish to fly"* [5]. The same report emphasizes the importance of fitness to fly and the need for intending travelers to satisfy themselves that they are generally fit to fly - not only for their own health but also for that of others.

Aim of the Review

This paper is aimed at highlighting the problems of the air travelers with disabilities, with updated protocol and guidelines on relevant technical and legal issues. Whereas the list of disabilities is long and exhaustive, the present review is limited to those with mobility and breathing problems only.

What is Disability? and Related Issues

"Persons with disabilities have the same international rights as other citizens, such as accessibility, and full and effective participation and inclusion in society, including freedom of movement and freedom of choice ".

[United Nations Convention on the Rights of Persons with Disabilities [6]

Disability, as viewed by the WHO, refers to an interaction between an individual and his health problems [7]. According to International Civil Aviation Organization (ICAO)[8] and European Parliament and the

Council [9] ,the "disabled person' or 'person with reduced mobility' means "*any person whose mobility when using transport is reduced due to any physical disability (sensory or locomotor, permanent or temporary), intellectual disability or impairment , or any other cause of disability, or age, and whose situation needs appropriate attention and the adaptation to his or her particular needs of the service made available to all passengers".* Those with stable and well controlled disease may, at times, present with various disabilities which could question their safety and comfort during an air travel. The concerns of the operating air carrier have legal issues which need to be given adequate consideration. The Centers for Disease Control and Prevention (CDC) emphasizes the need for appropriate steps, to be taken for those with disabilities, in reducing the severity of their problems by providing accommodations at various levels including the air travel [10].

The United States Air Carrier Access Act 1986 (ACAA), enforced through The Department of Transportation (US DOT) makes it illegal for airlines to discriminate against passengers because of their disability [11]. The British Disability Discrimination Act 1995 (DDA) applies to air travel in relation to the use of booking services and airport facilities and services. Similarly, the Access to Air Travel for Disabled People-Code of Practice, by the British Department of Transportation 2003, covers all aspects of air travel – from accessing information through to arriving at the final destination [4]. According to the WHO, the increase in persons with disabilities, the largest minority, is through population growth, medical advances and the ageing process [12]. The ICAO requires that the service, provided to the persons with disabilities, should be professional and "seamless"- a concept that includes a comfortable, safe and uninterrupted journey, with the provision of need -based assistance without extra charges [8].

Organization of the trip

"The practice of Travel Medicine involves management of health problems during travel, at destination(s) and on return" [13]

Air travel, an essential activity of glamorous life and the most preferred option for touching various spots on the globe, is no longer entire domain of healthy and wealthy. As highlighted by Shaw and Coles, those with disabilities and those without have the exact needs and desires. [14]. However, those with disabilities still and for the most part, remain excluded in the practice of tourism [15]. Whereas organizing a trip involves many skills, it is more so in those with disabilities. In most of the cases, the disabilities are irreversible. As justifiably remarked by Prof. Mike Morgan "*Tackling a disease that won't go away"* is not so simple. The methodical approach would be to discuss details of the proposed trip with the health care provider. The reason is obvious. Where are you going? When are you going? How are you going? For how long are you going? These issues must be settled before the health care provider could give his verdict "Fly or Not to Fly?" At occasion, the good judgment might be to advise postponement of the trip.

(I)—Selection of the Airline(s)/ Shop around:

Although, selection of airline is individualized discretion of the intending traveler , the health care provider should be informed about; operating airline (single or multiple), type of flight (non-stop or multi-stop), route (transit, number of segments), exact length of the flight and if delays are likely, policy on carrying and using oxygen including portable oxygen concentrators(POCs) and medical devices such as CPAP machines (when indicated),the facilities (wheel chairs, assistance to get from the airport lounge to the departure gate and on to the plane available at the outgoing and incoming airports), and the procedure of confirming fitness to fly).The intending traveler can then make an informed decision about the airline which is best positioned to suit him. Stroller's advice to the intending travelers to "*Shop around*" for an appropriate airline is really well-rewarding [16].

(ii)—Destination: Which? Single or Multiple?

Travelers with disabilities and those without have equal right to select any destination, on the globe, to visit. However, in case of former the weather (short-term conditions of atmosphere), climate (average daily weather for an extended period of time), altitude, terrain (hilly or rocky), air quality index (AQI), availability of healthcare facilities and duration of stay are of significant importance. The traveler needs to be realistic; the places visited before the onset of disabilities may not be suitable now. If the trip involves multiple places to visit, this applies to all segments. Take the example of the urban area of El Alto La Paz, Bolivia, the most high-altitude city on Earth, with about 1.9 million residents at about 12,690 feet (3,869 meters) above sea level.The airport is at 13,451 feet (4,100 meters). Risk of altitude illness is significant for travelers arriving in La Paz and more so for those continuing their travels to the Cordillera Real or skiing at Chacaltaya (17,785 feet ---5,421 meters). It is of note that, at present, Daocheng Yading Airport, located at an elevation of 14,472 feet (4,411 meters), serving. Doacheng County in the Garzi Tibetan Autonomous Prefecture of Sichuan Province is the highest-altitude airport in the world.

The impact of weather on those with breathing problems (notably COPD) is also important as it worsens the symptoms. Oymyakon (in Siberian Russia), is the coldest permanently inhabited place on Earth, where winter temperature averages minus 50 C (minus 58 F). It competes for coldest place on Earth with another village in the same region Verkhoyansk. Another issue is AQI at the destination (s). It has been defined by American Lung Association as "t*he system used to warn the public when air pollution is dangerous. The AQI tracks ozone (smog) and particle pollution (tiny particles from ash, power plants and factories, vehicle exhaust, soil dust, pollen, and other pollution), as well as four other widespread air pollutants"* [17]. Just refer to the recent global situation. The run down of Top 5 most polluted cities in the world (2021 Rankings) are: Lahore (Pakistan), Ghaziabad (India), Delhi (India), Aguascalientes (Mexico) and New Delhi (India) [18]. The deleterious effects of poor air quality cause an exacerbation of existing symptoms, impaired lung function, flaring-up allergies , increased hospital admission(s) and increased mortality rates.

(iii)---Duration of the Journey:

It depends on schedule of the flight: direct / indirect, domestic/international. The non -stop domestic flights are usually Short-haul (lasting up to 3 hours) or Medium-haul (lasting 3–7 hours) but may be Long-haul (lasting more than 7 hours). The longest non-stop domestic flight is from Honolulu to Boston—5,095-miles taking 11 hours and 30 minutes. The non-stop international flight could be of any type. The term Ultra-long-haul (also known as Ultra-long-range --ULR)) is used for those more than 12 hours usually lasting over 16 hours. Examples are flight from Singapore Changi Airport to JFK Airport New York covering distance of 9,540 miles in 18 hours, 50 minutes. Another examples are of flight from Auckland International Airport to Hamad Airport Doha covering distance of 9,032 miles in 18 hours, 5 minutes and that from Perth to London Heathrow (LHR) covering distance of 9,009 miles in 17 hours, 25 minutes. As may be seen, there is wide variation in duration if multi-stop flight is opted. For example, the non-stop flight between Perth and LHR takes 17 hours 25 minutes, different airlines with one stop take 21-30 hours, with two stops 29-34 hours and with three stops 30-50 hours. It has been shown that in passengers with breathing problems, notably COPD, the gradual fall in cabin oxygen pressure may result in significant desaturation [19]. Whereas, a direct flight is preferable long haul flights are best avoided.

(iv)—In-flight Medical Oxygen (when indicated)

After having chosen the best suited airline, the intending traveler should discuss with that his prescription of in-flight medical oxygen. According to Federal Aviation Administration (FAA), the carriage of passenger's

own oxygen tanks (containing liquid oxygen or compressed gas), on board is banned [20]. Since 2009, after the U.S. Department of Transport's ruling "Nondiscrimination on the Basis of Disability in Air Travel," *all airlines traveling to and from the United States are required by law to permit passengers to carry their Personal Portable Oxygen Concentrators (POCs) provided they have been approved for use by the FAA"* [21]. The POC user is responsible (as a reliable substitute of electric power which is denied by most of the airlines) for managing sufficient spare dry batteries (FAA approved). The airlines require that the batteries are fully charged and can supply power to the POC for no less than 150% of the listed flight [22]

Alternatively, Carrier-Supplied Portable Oxygen Bottles (POBs) are reliable option. Charges may be based on a flat fee, the number of travel segments, the number of POBs needed, or total air time. Because the health insurance may not cover such charges, it is important to consider the out of pocket expenses of in-flight oxygen when selecting among air carriers that serve the same destinations [23]. The airlines usually do not allow oxygen while taxing, during takeoff and landing [24]. If oxygen is required during all phases of flight, prior approval is necessary. Some airlines have the policy not to supply in-flight oxygen if the flying time is within six hours or less [24]. Moreover, the airlines do not take the responsibility of managing oxygen supplementation during stopovers [25]. When at the airport, the passenger must use his own POC before boarding, during transit and after landing. Alternatively, he is responsible for arranging himself any on-ground oxygen requirements during departure, transit and arrival [26].

Passengers who are identified as being hypoxemic at the moderate altitude of the cabin may also be hypoxemic at high altitude destinations such as Daocheng Yading Airport (14,472 feet --4,411 meters).Separate arrangements need to be made in advance, in case oxygen is required in transit.Those prescribed in-flight oxygen should be advised to receive oxygen while visiting high altitude destinations.

(v)-Continuous Positive Airway Pressure (CPAP) machines (when indicated)

The CPAP is strongly advised to those with Obstructive Sleep Apnea (OSA)—with or without COPD, especially during long haul flights. The airline must be consulted before reservation with the physician's letter, outlining the medical diagnosis and necessary equipment. It should state that the CPAP device should travel in the cabin as extra hand luggage. The seat in the airplane should be near an outlet to power the device. It must be switched off before landing. As a reliable substitute of electric power (which is denied by most of the airlines), dry cell battery powered CPAP device (able to power the device for up to 13 hours) may be used on long haul flights.

As per manufacture's recommendations, the humidifier should not be used during flight. Some latest waterless humidification devices use atmospheric moisture and moisture from the breath to humidify the airflow so there is no need to manually load water into its tanks to operate it. While CPAP (generating enough pressure to keep the throat open) and POC (increasing the amount of oxygen in the ambient air) function differently, they can also be used simultaneously in COPD top of OSA. For patients advised both oxygen and CPAP on board, additional planning is required. If continuous flow oxygen is not available (the POC is pulse-dose or the oxygen is supplied by POBs), oxygen and CPAP cannot be used simultaneously.

(vi)—Medical Clearance

As a matter of fact, the airlines are not obliged to accept anyone, for carriage, who wishes to fly. The objectives of medical clearance are to provide advice to passengers and their medical attendants on fitness to fly, and to prevent delays and, at occasion, diversions of the flight because of deteriorating health condition of the passenger [27]. It could be voluntary by the passenger or on demand by the airline.

Whereas, the airlines have the right to refuse passengers who are unfit to fly for medical reasons the fitness for air travel has become a growing issue [28]. Fit to fly? Whose decision is final? the attending physician or the airline? The IATA's Medical Manual, through its directive to all the members airlines, has made it clear that the medical clearance (permission to board the plane) is entire discretion of the carrier airline which has the right to impose conditions of carriage and to decide which type of special assistance could possibly be offered to the intending traveler. Every airline has a medical clearance procedure; adopted by local laws and procedures [29]. Although, it is virtually impossible to harmonize the individual airline's rules and forms, the IATA's medical guidelines have made the MEDIF (name given to the forms used by airlines) reasonably consistent.

(vii)--Travelling with an attendant/accompanying carer/travel companion

There is a question in MEDIF"*Can the passenger take care of his own needs on board unassisted (including feeding, toileting, mobility etc.)?"* [29]. If it is answered in affirmative, the airline will impose the condition of accompanying carer/ travel companion. The IATA has made it clear that the"*Cabin crew are employed as food handlers and are therefore unable to assist with toileting needs".*

According to the ACAA, the airlines may require a passenger, with a disability, to travel with an attendant ONLY if the airline staff determines he:

- Is unable to comprehend or respond appropriately to safety instructions;
- Has a mobility impairment so severe that the person is unable to assist in his or her own evacuation from the aircraft; or
- Has both severe hearing and severe vision impairments which prevent him or her from receiving instructions from in-flight personnel [11].

Of note, if a passenger with a disability and the airline disagree about the need for a safety assistant, the airline can require the assistant, but cannot charge for the transportation of the assistant [30].

(viii)-Conditions in which the Passenger is required to purchase Extra Seat

Some airlines in addition to imposing fees, for those needing in-flight supplemental oxygen, argue that one extra seat or more may be required to strap the POB(s) bottle next to the passenger, and charges will apply. Depending on the oxygen flow rate and flight time, the passenger may require more than one oxygen bottle on board [31].

Some airlines require a passenger with a full leg cast, while travelling in cabins other than First and Business Class, to buy an extra seat with moveable armrests so he can elevate his leg [32].

Whereas the airline obesity policies differ but one thing is common that if a passenger does not fit into a seat with an extension seatbelt and the armrests down, he will be charged for two seats or removed from the plane [33]. Carry-on baggage is ONLY permitted for the passenger and NOT the extra seat. When a passenger purchases an extra seat, they are entitled to checked baggage allowances/restrictions for each ticket/seat [34].

(ix)-Conditions of Refusal to Board

Whereas the US Department of Transportation requires airlines to carry passengers with disabilities there is, however, an exemption that allows

carriers to refuse transportation if a disabled passenger would endanger the health or safety of other passengers.

As a matter of principle, the airline will be unwilling to accept, for carriage, a passenger who is likely to be a hazard or cause discomfort to other passengers because of the physical or behavioral condition or considered to be a potential risk to the safety or punctuality of the flight including the possibility of diversion of the flight or an unscheduled landing. This is why they are keen to get answers to the following questions in the MEDIF: "*Would the physical and/or mental condition of the passenger cause distress or discomfort to other passengers? (Yes / No".*

It is of note that even after giving green signal to fly, the airline requires to be notified immediately of any change in health status or requirements of the intending traveler PRIOR to travel. Further more, the intending traveler whose condition has deteriorated later on or has not been accurately described in the MEDIF may be refused boarding in line with flight safety considerations. [29].

Accommodations Provided by the Airlines

"Tourists with disabilities may be excluded from certain attractions, especially if the degree of physical exertion is beyond their capabilities or access to the attraction is impractical given their disabilities".

Matthew Kwai-sang Yah et al [35]

The associated disability/ disabilities identified in the potential traveler might be due to the primary disease itself or its co-morbidities. According to the ACAA of United States, "*the airlines are required to provide passengers with disabilities many types of assistance, including wheelchair or other guided assistance to board, deplane, or connect to another flight; seating accommodation assistance that meets passengers' disability-related needs; and assistance with the loading and stowing of assistive devices* [11]. The ICAO [9] and the ACAA [11] require that *"the persons concerned should receive this assistance without additional charge".*

(a)-Assistive Devices

According to US Department of Transportation, "*an assistive device is any piece of equipment that assists a passenger with a disability in coping with the effects of his or her disability* [36]. The most common devices are wheelchairs, in-flight medical Oxygen and Continuous Positive Airway Pressure (CPAP) machines.

(A)-At the Airport

(i)-Wheelchairs

The wheel chair should be requested while booking the flight, to give sufficient time to the airline to manage and confirm to the passenger. The airlines offer several options for those in need of, according to the nature and extent of their disability [4, 29]

-WHCR :Passenger who can walk up and down stairs and move about in an aircraft cabin, who requires a wheelchair or other means for movements (Electric Buggy Service] between the aircraft and the terminal, in the terminal and between arrival and departure points on the city side of the terminal.

-WCHS :Passenger who cannot walk up or down stairs, but who can move about in an aircraft cabin and requires a wheelchair to move between the aircraft and the terminal, in the terminal and between arrival and departure points on the city side of the terminal.

-WCHC :Passenger who is completely immobile who can move about only with the help of a wheelchair or any other means and who requires assistance at all times from arrival at the airport to seating in the aircraft or, if necessary, in a special seat fitted to his/her specific needs, the process being inverted at arrival. [4]

-WCHP:Passenger with a disability of the lower limbs who has sufficient personal autonomy to take care of him/herself, but who requires assistance to embark or disembark and who can move about in an aircraft cabin only with the help of an onboard wheelchair.It is, however, not yet internationally recognised [4].

(ii)-Assistance with Airport Security Screenings

The airline may provide a qualified employee or allow an unticketed parent or assistant to help a person with a disability through security [1]. Unticketed passengers can request a permit from the airline's check-in counter that will allow them to pass through security with the person they are assisting.

According to the existing rules and regulations of Transportation Security Administration (TSA), the security screening for people with disabilities should be the same as any other passenger with some exceptions. The TSA says: "*anyone who cannot stand with their arms raised at shoulder level for the 5-7 second duration of the scan; anyone who is not able to stand without the use of a cane, crutch, walker, etc.; people who use service animals; people using or carrying oxygen; and individuals accompanying and providing assistance to those individuals will be screened using alternate screening techniques including pat-downs"* [1].

(B)-In-flight accommodations

(i)-Seating accommodation

Under the ACAA, airlines are required to provide certain seating accommodations to passengers with disabilities who self-identify as needing to sit in a certain seat. However, the passenger should make reservations as early as possible and request the needed seating accommodation. The airlines have their set seat assignment criteria.

- Bulkhead Seats (directly behind the bulkhead, or the interior dividing wall separating cabins on larger planes) have more legroom than other seats of the same fare class. The passengers with a service animal or a fused leg have priority for these [34, 37]. However, some airlines do not allow POC users to be seated on bulkhead seats [38], while others disallow these seats to be allocated to those with fused leg [32].
- An Adjoining Seat: If the passenger is traveling with a personal care attendant who performs a function that is not required to be performed by airline personnel, for example assisting with eating, toileting.
- Emergency Exit Row Seats: These are very demanding because they provide maximum leg room in the same fare class. The FAA limits seating in exit rows to those persons with the most potential to be able to operate the emergency exit and help in an aircraft evacuation [11]. However, these cannot be allocated to those with disabilities, to avoid impending emergency egress [39]. Similarly, the passenger operating a POC is not permitted to occupy an exit seat in the airplane [40], to avoid possible block during emergency evacuation.
- Seats Near the Toilets: The seating adjacent to the aisle and in close proximity to the toilets may be of great help to those who need wheel chair for going to toilets and also for those who are advised to limit their movements in the airplane for fear of desaturation (patients with COPD).

(ii) Other assistance

According to FAA requirements, the airline personnel, in the airplane, MUST assist a passenger with a disability to:

- Move to and from seats as a part of the boarding and exiting process.
- Load and retrieve carry-on items, including mobility aids and other assistive devices stowed on board the aircraft.

The Unmet Needs / Expectations versus Reality

"Even at the check-in stage, passengers have found that they are often treated as commodities. If they try to enquire about conditions on board, or get seats or groups of seats that they particularly want, they are made to "approach the check-in desk as supplicants rather than partners to an equal-sided contract".

[Excerpt 1:85 from the Fifth Report dated 15th November 2000 of "Select Committee on Science and Technology of House of Lords UK Parliament"----5]

The British Code of Practice of Access to Air Travel for Disabled People argues that the responsibility for meeting the needs of disabled passengers should be accepted at the highest levels and delegated to people with the skills and authority to influence the design and operation of aircraft and airport terminals or to alter procedures. Moreover, the staff at immigration and customs desks and all cabin crew should receive disability awareness training [4]. Whereas, the number of air passengers, with disabilities, is increasing, their needs and expectations are also on rise. The Airport Accessibility Report 2017 of British Civil Aviation Authority has shown that the number of passengers with a disability traveling by air has grown by more than two thirds since 2010. Furthermore, requests for use of airport assistance services from these passengers also rose by more than 66 per cent within the same timescale [41].

The majority of the complaints of dissatisfaction and displeasure, from the passengers with disabilities, relate to sub-optimal accommodations at airport and in-flight assistive devices. According to The European Federation of Allergy and Airways Diseases Patients Associations (EFA), those with disabilities are still experiencing discriminatory treatment at airports and on-board aircraft [42]. The actual service made available to such persons is disappointing in significant number of cases. Even getting wheelchair, at certain airports, becomes cumbersome. A septuagenarian, with COPD and disease specific and age related disabilities, shared his experience of a European airport. When he reached the Assistance Desk for a wheel chair, which was pre-notified at booking with written confirmation from the airline, he was advised "Check -in first and then you will get the wheel chair". He had to drag himself to the Check-in Counter and then return to the Desk to "qualify" for the wheel chair. Sadly enough both the points were in opposite directions. Some airlines charge handsome amount for this basic need of disabled travelers even though the Regulations clearly say: *"the persons concerned should receive this assistance without additional charge".* An exploratory study, conducted in Ben-Gurion University, of flight experiences of people with disabilities revealed that the wheel-chair users confronted with humiliation and physical suffering [43].

In-flight medical oxygen is a complex issue. The EFA argues "*Each airline has a different policy with regards to the acceptance of passengers requiring oxygen, which makes traveling by air complicated and often very expensive "*[42]. Whereas the FAA approved POCs are permitted, certain airlines outrightly disallow carrying them on board. Some allow in First and Business class cabins only, with the additional restriction that they should be battery operated. Although the POC batteries may be rechargeable during layovers, the access to electrical outlets is not guaranteed.

Alternatively, Carrier-Supplied Portable Oxygen Bottles (POBs) are reliable option but the fees may be extortionate, as already discussed (see above). Sometimes the information made available by the airlines is ambiguous. One airline has notified "*We can only provide in-flight therapeutic oxygen to one person on board so if you need to use oxygen you must book it in advance"* [44]. It is unclear what they mean? If there are more than one passenger in a flight, needing supplemental oxygen, what will happen?

The EFA strongly advocates that oxygen should be made available to patients in need at all times and free of charge while they are traveling by air. Similarly, in 2012, Transport Committee of the European Parliament (EP), in its report on "The Rights of Europeans traveling by Air", sought to require the provision of free oxygen by all airlines in Europe [42]. It is important to note that, according to FAA, the airlines are entitled to charge for providing in-flight supplemental oxygen [21].

The latest IATA regulations make it clear that it is entire discretion of the airline(s) whom, and on what conditions, to carry on board. They have enforced a strict procedure of medical clearance for those in need of special assistance which should be taken seriously by intending travelers. It is of note that the ACAA admits " *the airline has the ultimate decision in "the interests of all passenger's safety."[11].* Additionally, it is a legal requirement that the passengers sign the following undertaking, before their request for special assistance is processed: "I *am prepared at my own risk to bear any consequences which carriage by air may have for my state of health and I release the carrier, its employee's servants and agents from any liability for such consequences. I agree to reimburse the carrier upon demand for any special expenditures or costs in connection with my carriage"* [29]. The IATA adds "*Cabin crew are not authorized to give special assistance to particular passengers, to the detriment of their service to other passengers".*

Complaints against Discriminatory Treatment

"Travel by air is commonly accepted as a commodity and no longer considered a luxury"

ICAO Working Paper—Montréal, 18 to 22 March 2013

Whereas the ACAA-- 49 U.S.C. 41705, prohibits discriminatory treatment of persons with disabilities in air transportation, the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21; Public Law 106-181) requires, among other things, that the Secretary of Transportation "*regularly review all complaints received by air carriers alleging discrimination on the basis of disability"* and *"report annually to Congress on the results of such review"* [45].

If a passenger feels the airline is not following the law, has discriminated against him on the basis of disability (which includes not providing the required accommodations) and discussing the problem with airline personnel has not resolved the issue, there are other steps he can take: to lodge complaint with the Consumer Protection Department of IATA and, if necessary, to the relevant Department of Transportation against the mishandling and violation of the regulations, set forth for the protections of passengers with disabilities. According to the nature and extent of the problems, there are other forums which could be approached; the details being available on website. However, the fittest closing words of this section would be of Access to Air Travel for Disabled People – Code of Practice [4]: "It *is very important to remember that meeting needs (of the passengers with disabilities) cannot always be guaranteed".*

Conclusion

"Aerodynamically the bumblebee should not be able to fly. But the bumblebee doesn't know that so it goes on flying anyway." –

Mary Kay Ash (1918-2001)- A dynamic communicator

It is a pity that the air travel, an enriching and fulfilling activity of glamorous life both for able-bodied and those with disabilities, offers considerable stress to the latter as they face numerous barriers from the start of the trip. Most of the issues arise from lack of awareness, confusing

and inconsistent policies of various airlines on identical issues, inadequacy of job-oriented airport personnel and sub-optimal enforcement of the rules and regulations. They are the main areas needing vigilance and improvement.

The fitting closing sentence is -undoubtedly "*the freedom to fly is more accessible than ever* "but those with disabilities, unfortunately, are unable to enjoy.

Acknowledgement

The author expresses great appreciation to Dr. Murad Ahmad Khan (Vancouver, BC) for his insightful suggestions and stimulating discussions, throughout the conduct of this study.

Competing Interests

The author declares that he has no direct and indirect financial, commercial, personal/career affiliation with the article, counting any individually held viewpoint that are relevant to their work, to disclose.

Funding:

The author received no financial support, from any quarter, for the research, authorship, and/or publication of this article.

References

1. Friendship Circle-Air Travelers with Disabilities: Here are your rights -- Special Needs Blog.
2. ICAO Uniting Aviation--The World of Air Transport in 2019.
3. IATA - More Connectivity and Improved Efficiency -2018 Airline Industry Statistics Released---**Press Release No:** 45 dated 31 July 2019.
4. British Department of Transportation-Access to Air Travel for Disabled People – Code of Practice- March 2003-Department for Transport Great Minster House London SW1P 4DR
5. House of Lords. Science and Technology Fifth Report.
6. United Nations--- Department of Economic and Social Affairs-Disability- General principles | Article 3.
7. World Health Organization, International Classification of Functioning, Disability and Health (ICF)external icon
8. ICAO—Manual on Access to Air Transport by Persons with Disabilities—International Civil Aviation Organization Doc 9984 First Edition — 2013; ISBN 978-92-9249-193-2999 University Street, Montréal, Quebec, Canada H3C 5H7
9. European Parliament--Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air (Text with EEA relevance)
10. CDC- Disability and Health Promotion -What is Disability [available at https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html--accessed January 23,2022]
11. US Department of Transportation- Air Carrier Access Act (ACAA). Passengers with Disabilities.
12. United Nations: Factsheet on Persons with Disabilities – Department of Economic and Social Affairs Disability.
13. Khan IA, Khan MA—Travel Medicine *in* Public Health and Community Medicine; Time Publisher Karachi January 2016 Chap 36:585-593.
14. Shaw G., Coles T. Disability, holiday making and the tourism industry in the UK: a preliminary survey. Tourism Management, 2004; b25 (3), 397–403. doi:10.1016/s0261-5177(03)00139-0
15. Bélanger CE, Jolin L-The International Organisation of Social Tourism (ISTO) working towards a right to holidays and tourism for all. Current Issues in Tourism, 2011; 14(5), 475–482. doi:10.1080/13683500.2011.568056
16. Stroller JK- Evaluation of patients for supplemental oxygen during air travel.
17. American Lung Association- Using Air Quality Information to Protect Yourself from Outdoor Air Pollution: What is Air Quality Index.
18. Smart Filters – 25 Most Polluted Cities in the World (2021 Rankings).
19. Ahmedzai S, Balfour-Lynn IM, Bewick T, Buchdahl R, Coker RK et al- Managing passengers with stable respiratory disease planning air travel: British Thoracic Society recommendations-Thorax 2011;66:i1ei30. doi:10.1136/thoraxjnl-2011-200295.
20. US Department of Transportation- FAA -Pack Safe – Oxygen (compressed or liquid).
21. Federal Aviation Administration- Portable Oxygen Concentrators- Advisory Circular dated May 24, 2016 AC No: 120-95A (CANCELLATION. AC 120-95 dated October 23, 2007,) Department of Transportation.
22. Air Canada--Flying with a Portable Oxygen Concentrator.
23. UpToDate-- Patient education: Supplemental oxygen on commercial airlines (Beyond the Basics).
24. British Aiways-MEDIF.
25. Health Link BC -Travelling with Oxygen.
26. Etihad Airways -Medical assistance onboard.
27. Bagshaw M, Illig P. The Aircraft Cabin Environment. Travel Medicine. 2019; 429-436. doi:10.1016/B978-0-323-54696-6.00047-1
28. Silverman D, Gendreau M-- Medical issues associated with commercial flights-Lancet 2008; 373: 2067–77---Published Online February 19, 2009 DOI:10.1016/S0140- 6736(09)60209-9
29. IATA- Medical Manual—International Air Transport Association – July 2020, 12th Edition Montreal -Geneva
30. US Department of Transportation- Aviation Consumer Protection-Passengers with Disabilities.
31. Singapore Airlines-- Health Regulations: Supplementary oxygen on board.
32. British Airways---Broken Bone.
33. Smart Travel --Airline Obesity Policies: Will You Have to Buy an Extra Seat? | Smarter Travel.
34. Delta Airlines--Seating Information.
35. Yau M K-s, Packer T, Mckercher B—Traveling with a disability: More than an Access Issue- Annals of Tourism Research October 2004 DOI: 10.1016/j.annals.2004.03.007
36. US Department of Transportation-Lost, Delayed, or Damaged Baggage -Assistive Device.
37. Lufthansa -Traveling with disabilities to/from the USA.
38. Virgin Atlantic--Medical facilities and oxygen onboard.
39. Keystone JS, Kozarsky PE, Connor BA, Nothdurft HD, Mendelson M, Leder K-Travel Medicine Elsevier Health Sciences 2019 4th Edition
40. Information Institute—121.574 Oxygen and portable oxygen concentrators for medical use by passengers - Cornell Law School.
41. Civil Aviation Authority- Airport accessibility report 2016/17 - Civil Aviation Authority, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR. 2017
42. EFA-Enabling Air Travel with Oxygen in Europe: An European Federation of Allergy and Airways Diseases Patients Associations (EFA) Booklet for Patients with Chronic Respiratory Disease
43. Poria Y, Reichel A, Brandt Y-The Flight Experiences of People with Disabilities: An Exploratory Study-J Travel Research 2009.
44. British Airways-Medical Conditions and Pregnancy.
45. US Department of Transportation- Annual Report on Disability-Related Air Travel Complaints.

This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here: **Submit Manuscript**

DOI: 10.31579/2690-8794/123

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more https://auctoresonline.org/journals/clinical-medical-reviews-and-reports-