Facilitating Guidelines for Individuals with Down

Syndrome, Their Families and Response Teams

after Disaster and Emergency

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Table of Contents	
INTRODUCTION	3
INSTITUTIONS IN CHARGE OF DISASTER AND EMERGENCY SITUATIONS	3
THINGS TO BE DONE BY INSTITUTIONS BEFORE DISASTERS AND EMERGENCIES	4
WHAT IS DOWN SYNDROME?	5
THINGS TO DO AFTER DISASTER AND EMERGENCY RESPONSE TEAMS	6
THINGS TO BE DONE BY FAMILIES/CARE PROVIDERS	8
HOW SHOULD THE APPROACH OF FAMILY/CAREGIVERS BE AFTER TRAUMA?	9
MOBILE APPLICATIONS	10
LIST OF ALL TRAININGS AND MATERIALS	13
RULES TO FOLLOW WHEN PREPARING TRAININGS AND MATERIALS	14
DISASTER AND EMERGENCY CONTACT INFORMATION CARD	15
BIBLIOGRAPHY AND CONTRIBUTORS	18

## INTRODUCTION

Individuals with Down syndrome may encounter difficulties in understanding their own and someone else's mental states, such as wishes, beliefs, emotions, in social interaction during moments of stress, and deciding on behaviour appropriate to the current situation during interaction with people. They may show limitations in postponing their wishes, correctly identifying and expressing their needs. Those who have not received a systematic disaster and emergency training before may not be able to grasp what these situations mean and may not be able to decide how to act. When they cannot understand the current position, they may react differently such as anger, introversion, stubbornness, resistance in the face of referrals made to them due to chaos, stress, noise and turmoil in the environment. They may have problems protecting themselves according to their mental special needs in the disaster area after disasters or emergencies. It is important to practise with simple commands and at frequent intervals in order to learn this behaviour, but these exercises are not done as often as necessary. This, in turn, can complicate the management of the process in the event of a disaster and emergency. People with Down syndrome who are unable to protect themselves or who are likely to involuntarily stay mobile or immobile where they are located need the help of those around them in the event of a disaster or emergency. They may have limitations in understanding announcements and warnings, reading and understanding signs or written information, following instructions, responding to instructions from the emergency response team or search and rescue personnel, expressing their needs, or interpreting events. They may have difficulty understanding where they are in an environment where there are foreign people and they may exhibit problem behaviours. It is necessary to have pre-prepared evacuation, shelter and protection plans for these people, as well as information and materials that will allow the teams in the field to communicate easily with these people after disasters and emergencies in order to survive disasters or emergencies with the least damage.

## INSTITUTIONS IN CHARGE OF DISASTER AND EMERGENCY SITUATIONS

All ministries, institutions and organisations are obliged to immediately support the governors in any work to be done regarding disaster and emergency services under the coordination of the Disaster and Emergency Management Presidency. Ministries, institutions and organisations that are the main solution partner are responsible for establishing disaster and emergency management centres and ensuring that they are carried out on a 24/7 basis. Support solution partner The ministry, institutions and organisations are responsible for providing personnel, vehicles, tools, equipment support.

- o The Ministry of National Education is responsible for the evacuation of students sheltering in all dormitories and students in schools that it is responsible for supervising during a disaster, ensuring that the needs of evacuated students such as health, nutrition, housing are met by other service groups, and ensuring the continuity of education and training services as a matter of urgency after a disaster.
- o The Presidency of the Council of Higher Education is responsible for the evacuation of students who are sheltering in university dormitories and studying at universities during a disaster, ensuring that the needs of evacuated students such as health, nutrition, housing are met by other service groups, and ensuring the continuity of education and training services as a matter of urgency after a disaster.
- The General Directorate of the Credit and Dormitories Institution is responsible for the evacuation of students sheltering in their dormitories, ensuring that the needs of evacuated students, such as health, nutrition, housing, are met by other service groups.
- The Ministry of Agriculture and Forestry is responsible for the works related to the supply of potable water, its transportation, and the drilling of sufficient water wells when necessary, until the infrastructure works are completed in the disaster area.
- The Turkish Employment Agency provides workers, primarily from the disaster area, upon the request of the Disaster and Emergency Management Presidency after the disaster occurs.
- The Ministry of Transport and Infrastructure is responsible for communication, transport infrastructure, transportation, technical support and supply services.
- The Ministry of Internal Affairs is responsible for fire, burial, evacuation and placement, security and traffic services.
- o The Ministry of Health is responsible for health services.

- o The Ministry of Environment and Urbanization and Climate Change is responsible for damage assessment, infrastructure and debris removal services.
- The Ministry of Family and Social Services is responsible for psycho-social support, donations in kind, warehouse and distribution services.
- o Ministries, governorships and non-governmental organisations, especially the Turkish Red Crescent, are responsible for nutrition services.

## THINGS TO BE DONE BY INSTITUTIONS BEFORE DISASTER AND EMERGENCY CASES

- 1. Identify individuals with Down syndrome living in your area of responsibility.
- 2. Ask families to fill out a "Contact Information Card" that teams can use in disaster and emergency situations. Create a secure national system in which this card can also be replenished digitally. The right of the family not to report should be respected in these requests.
- 3. Determine how much of the information on the flashcards will be accessible to whom before and after the disaster and emergency.
- 4. Inform families about how they can reach you after a disaster or emergency, and which buildings they can use. Provide information about what families can do. List where families can get services and pass it on to families.
- 5. Plan preparations that will meet the needs specified in the Contact Information Card. (Other than the declared needs, tracking devices and sound-reducing headphones in the form of wristworn watches can be added to the list of materials as many as the number of people with Down syndrome. In this way, the safety of individuals with Down syndrome in the disaster area can be ensured and stress factors caused by the environment can be reduced. But it should be remembered that some individuals may have problems with installing a tool or protecting a installed tool.)
- 6. Involve non-governmental organisations in your area of responsibility and institutions such as schools, nursing homes, hospitals, special education centres, families and individuals with Down syndrome in your planning and information work. Create a communication network with these institutions and people. Discuss with them your disaster and emergency protocols and what you will request from them after the disaster and emergency. Ask for a representative from each of these institutions.
- 7. Create accessible areas where individuals who may experience post-traumatic anger outbursts and behavioural problems can calm down in areas where they will gather after disasters and emergencies.
- 8. Plan the trainings to be given to people with Down syndrome and their families with non-governmental organisations in your area of responsibility and institutions such as schools, nursing homes, hospitals, special education centres and repeat these at regular intervals. Ensure that the trainings listed below are included in the trainings to be given.
  - i. Changes in the environment, risks and training to avoid risks (What may disturb us, what should we do in this case).
  - ii. Food safety (spoiled food, clean water, finding safe food and water sources, etc.) and basic post-disaster hygiene training
  - iii. Training on what to do during evacuation (using stairs and elevators, finding exits, going to assembly areas, meeting family members, finding reference points according to their location and exhibiting appropriate behaviour)
  - iv. Appropriate behaviour training after disasters and emergencies at school, at work, in the shopping centre, on the street.
  - v. Training and cards for identifying and postponing our needs after a disaster and emergency.
  - vi. Training and cards to stay safe and avoid abuse (where to go, Who to trust, Protection from abuse)
  - vii. Training and cards for understanding the Disaster and Emergency situation, recognizing and distinguishing hazard warnings, and behaving appropriately.
  - viii. Disaster and Emergency notification training and cards.
  - ix. Disaster and Emergency notification and mobile applications that can be used after training and cards.
  - x. Training to recognize the duties and uniforms of the teams who will be on duty in the field after a disaster and Emergency
- 9. Provide training to all teams and volunteers who will be in the field after Disaster and Emergency on what people with Down syndrome may need and how to communicate.

- 10. Prepare easy-to-understand and illustrated information brochures that you will use after disasters and emergencies, and communication cards that you can use for those who cannot speak.
- 11. Establish a separate team to deal with individuals with Down syndrome who are affected by disaster or emergency in the area but do not need search and rescue teams.
- 12. Prepare a checklist by using this section so that the teams who will be on the field can use it after the disaster.
- 13. Start work on adding regulations related to people with disabilities to the following regulations.
  - Disaster and Emergency Response Services Regulation: https://www.resmigazete.gov.tr/eskiler/2022/02/20220224-31.pdf
  - b. Law About the Measures to be Taken and the Assistance to be Given to Public Life Due to Institutional Disasters
    - https://www.mevzuat.gov.tr/MevzuatMetin/1.3.7269.pdf

  - d. All laws and regulations related to Afad: <a href="https://www.afad.gov.tr/kanunlar">https://www.afad.gov.tr/kanunlar</a>
  - e. Turkey Disaster Response Plan (TAMP) :

    <a href="https://www.afad.gov.tr/kurumlar/afad.gov.tr/2419/files/Afet\_Mud\_Pl\_ResmiG\_20122013">https://www.afad.gov.tr/kurumlar/afad.gov.tr/2419/files/Afet\_Mud\_Pl\_ResmiG\_20122013</a>

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## WHAT IS DOWN SYNDROME?

Down syndrome is a genetic difference, a chromosomal abnormality. In the simplest terms, while the number of chromosomes in an ordinary human body is 46, this number is 47 in individuals with Down syndrome due to the fact that there are three 21st chromosomes. Some physical characteristics seen in people with Down syndrome are slanted small eyes, flattened nose, short fingers, curved little finger, thick nape, the only line in the palm, the big toe is lighter than the other fingers. All or more of these features can be seen. Individuals with Down syndrome are generally shorter than their peers and if they do not acquire the right eating habits due to their slow metabolism, they may experience weight problems in later ages. They need physiotherapy support due to different degrees of muscle laxity (Hypotonia). It is very important that we contact the physiotherapist as soon as your baby is born, get information and prepare a forward-looking support program. Some babies may even have difficulty holding their heads for a long time depending on whether the hypotonia is less or more, but with the support of physiotherapy, they complete the developmental steps at their own pace.

Babies with Down syndrome grow more slowly than their peers, with exceptions. Their mental development is lagging behind. This retardation appears more pronounced as they grow older, but with appropriate educational programs, children with Down syndrome achieve many successes and are able to build meaningful lives in public life. A regular and disciplined training program and plenty of repetition is the most important factor here. Individuals with Down syndrome may be more prone to certain disorders. Therefore, it is vital that health checks are carried out without interruption and on time, and that the right health counselling is obtained. Like any child, children with Down syndrome have different levels of intelligence, abilities and personality. The key here is to get timely and correct support so that your child can use his/her capacity to the maximum. Options such as early education programs, physiotherapy, language therapy, alternative therapies, playgroups should be thoroughly evaluated by families and decisions should be made by reaching the right resources. For more information, you can visit www.downturkiye.org.

## THINGS TO DO AFTER DISASTER AND EMERGENCY RESPONSE TEAMS

- 1. Identify the institutions and non-governmental organisations serving individuals with Down syndrome in your area and discuss your requests with them.
  - (Ask for a representative from each of these institutions. Be sure to inform them about your duties and responsibilities, what materials you have, what you can afford, where services can be obtained, and the responsibilities and services of other institutions.)
- 2. Contact to the team that will take care of individuals with Down syndrome who have been affected by a disaster or emergency in the area but do not need search and rescue teams.
- 3. When a person or families with a child with Down syndrome contact the relevant team;
  - a. Ask him to fill out a "Contact Information Card". In these requests, the right of the person and family not to report should be respected. Explaining why this information card is requested and with whom to share it may make it easier to get information. Personal information cards should be well protected and as much of the information in them as necessary should be shared with the predetermined responsible persons in terms of security. A person with Down syndrome may not be at a level or condition to understand or fill out this card. In this case, do not be persistent and get information by different methods.
  - b. Ask the needs of individuals with Down syndrome to themselves, their families or their caregivers at regular intervals until the disaster or emergency is over. Renew your services and stocks according to these needs.
  - c. Inform families and individuals with Down syndrome about how to contact you, what they should do in the post-disaster process, list and communicate where they can get services. The materials that informations are made should be in a way that individuals with Down syndrome can understand. Notifications sent by message should be made in a simple way, both in writing and as a voice message.
  - d. Inform families about buildings where accessible, private areas may be available. (Disasters affect people with mental disabilities more than anyone else, they may have difficulty adapting to rapid changes, these people may not calm themselves under stress and may display angry behaviours. For this reason, simple, quiet, isolated environments where they can calm down should be offered. Identify shelters in advance where these environments can be created.)
  - e. Regularly check the buildings and surroundings where people with Down syndrome are housed until the disaster and emergency is over.
    - . Pay attention to the information specified in the "Person Information Card" during the control.
  - f. Some people are sensitive to sound so have noise cancelling headphones to give them. In this way, stress factors caused by the environment of individuals with Down syndrome in the disaster area can be reduced. However, it should be kept in mind that some individuals may have difficulties in fitting or protecting a tool.
  - g. Take the following precautions against the risk of loss or abduction of a person:
    - i. If he needs to go somewhere, be sure to appoint a companion with him. Don't send it alone. If they lose each other with their companion, write down information such as where to go, who to meet there, and your contact number, just in case, and give them to the person.
    - ii. If you have a mobile phone with you, use tracking applications to allow the person to follow you and you to follow him. When the person meets with his family, do not forget to remove the person and yourself from these applications.
    - iii. Tracking devices in the form of wrist-worn watches can be added to the bill of materials in order to be able to use them against the risk of loss. In this way, the safety of individuals with Down syndrome in the disaster area can be ensured. However, it should be kept in mind that some individuals may have difficulties in fitting or protecting a tool.
  - h. Contact the non-governmental organisation you are in contact with and check if they have information about the person you rescued.
  - i. You can use a special armband for individuals with communication difficulties to be noticed by teams. What the armbands mean should be known by all teams before the disaster and emergency situation.
  - j. When evacuating after a disaster or emergency, do not forget to evacuate any support devices and other supports (for example, mobility devices, respiratory support devices, medicines, guide animals, etc.).
  - k. We can pay attention to the following in communication with individuals with Down syndrome;

- i. Find out if people can read.
- ii. Know that the person opposite you is very scared and under stress, and give him time. Don't force him to talk or tell you what happened.
- iii. Keep emergency contact cards for people who can't talk.
- iv. Keep informative documents with photos for those who cannot speak. Go over the documents together and read the texts together.
- v. Take into account the person's age and condition while talking.
- vi. Speak calmly, without shouting, with a clear and unambiguous language, in short sentences, in a non-technical everyday language in verbal communication. Do not give the instructions one after another. If possible, give one instruction, and after that, say the second instruction. Wait patiently for the other side to understand and react.
- vii. Do not touch the individual, ask permission if you need to touch, and describe how to touch. In particular, individuals with sensory sensitivity may be overly sensitive to touch and may overreact.
- viii. Do not engage in behaviour that makes the individual nervous.
- ix. Ask the person whether s/he has identification identity, wrist, tracking device etc. If you can't communicate, use communication cards.
- x. If he reacts to one of the written/ oral/ visual communications, ask the necessary questions for help in the same way. If he gets angry and doesn't answer your questions, try to calm him down by talking about different topics and chat in a way that allows him to stay with you until the authorities arrive. During this time, observe whether he is injured.
- I. Motor characteristics to be considered in people with Down Syndrome:<sup>1</sup>
  - i. They may have difficulty following directions and expressing themselves.
  - ii. They can't move fast.
  - iii. If they have obesity, vision and hearing problems, their mobility may be more affected.
  - iv. They may have poor walking, running, swimming, stair climbing, climbing, jumping and jumping skills.
  - v. They may be insufficient to wear the materials such as masks, helmets, life jackets and blankets given by the rescue teams to their bodies.
- m. Health problems that need to be considered in people with Down Syndrome:
  - i. Most of them may have thyroid dysfunction. Determine whether s/he is taking thyroid medication.
  - ii. Vision and hearing problems are observed more frequently. Determine whether there is the use of glasses or hearing aids.
  - iii. Heart diseases are observed more frequently. Determine if he or she regularly uses medication.
  - iv. People with Down syndrome have different degrees of hypotonia and joint flexibility. Especially those who are unconscious may have their necks back more than normal. Therefore, it is vital to support the joints during transportation.
  - v. You can check out the Down syndrome health checklists for other risks. https://www.downturkiye.org/icerik/125-saglik-kontrol-listesi
- n. Sensory integration problems that need to be considered in people with Down Syndrome:<sup>2</sup>
  - i. Individuals with Down syndrome who have problems perceiving visual stimuli and distinguishing these stimuli may have difficulty distinguishing the specialists in the rescue team because it is difficult for them to perceive objects or people in the background that they need to focus on in a crowded or complex environment. These individuals may avoid jumping because they cannot accurately determine the distance when it is necessary to jump from a high place. It is possible to get closer to these individuals at the time of disaster considering such situations, if the experts in the rescue team support them with a flashlight, the stimulus will become more important and it will be easier for them to distinguish the point that needs to be focused on.

<sup>&</sup>lt;sup>1</sup> Physiotherapist Bedia Kocabalkan

<sup>&</sup>lt;sup>2</sup> Physiotherapist, Sensory Integration Specialist Ebru Albayrak Sidar & Physiotherapist Mehtap Çalak

- ii. Individuals with Down syndrome who have vestibular sensitivity may be wary of high floors and situations where their feet will lose contact with the ground, as they may experience gravitational insecurity. You can carry them as close to the ground as possible By saying that they are safe while carrying these individuals, without shaking them, and make them feel the ground with their feet. If the individual has tactile sensitivity, s/he may try to resist you or refuse, in which case you can make him/her hold you instead of holding him by the body.
- iii. Individuals with auditory sensitivity with Down syndrome may have difficulty calming themselves when the rescue team blows the whistle or are exposed to loud noise during a disaster, and they may give different reactions such as crying, introversion or tantrums. These individuals can be informed in advance that they may be exposed to loud sound during a disaster and taught that they can use headphones or plugs that pass through little sound during a disaster, and if not, they can protect themselves by covering their ears. After the disaster, experts also inform these individuals about the loud noise that may occur during the intervention before they intervene, give the individual a headset that reduces the sound if they can reach them, explain how long the sound will last, control the situation of the person by cutting the sound for a short time, and that everything is under control, what Telling how much time is left will facilitate the management of the process.
- 4. The application of on-site shelter should also be evaluated by taking into account the specifics of the disaster and emergency situation, the risk situation and the needs of individuals. The following questions should be answered during these evaluations:
  - a. Is the building suitable for on-site sheltering?
  - b. Will the building and its surroundings be controlled by emergency teams? How will it be controlled?
  - c. What kind of needs will the individual and his/her family/caregiver have?
  - d. Is the building suitable for the supply and storage of needed materials?
  - e. Is the building suitable for providing emergency services?
  - f. Is the building in a position to provide the necessary security in case of a recurrence of disaster and emergency?
  - g. In this practice, which area of the building or which room of the apartment will be used as a shelter for on-site shelter practice. What are the extra protective measures that need to be taken? (For example, choosing areas away from the glass edges in case of a conflict, covering the windows with more protective materials, etc.)
- 5. Do not force the individual to take him to the hospital if he is not injured and sick. The hospital may not be a positive experience for all of them, and so they may be extra traumatised. If possible, health checks should be carried out in the area and if there is no health risk, they should not be referred to the hospital.
- 6. When team changes convey the information you learned about the person to the authorities..
- 7. Be sure to get trauma treatment after the incident is over.

## THINGS TO BE DONE BY FAMILIES/CARE PROVIDERS

- Information card about individuals with Down syndrome. An example of a "CONTACT INFORMATION CARD" is below
- 1. You can keep documents such as surgery minutes, hospital records, educational reports of your child in printed form as a file and also store them in the cloud environment. Thus, you can always share your file from the cloud in case the printed document cannot be accessed. We recommend that you share your printed and cloud-based file with a relative in another province, if possible, and add this relative to the list of people who need to be accessed in the event of a disaster. In times of disaster, there may be a shortage of access because people in the same area will be victims of disaster. For this reason, it would be useful to include a contact information from a different city on the contact card.
- 2. Become a member of a non-governmental organisation working locally and nationally on individuals with Down syndrome and share this information with them. Do not forget to give the non-governmental organisation permission to share this information with institutions in the event of a disaster. The NGO may request a written permission from you for this within the scope of the LPPD.

- 3. Sharing this information with public institutions after disasters and emergencies will facilitate access to disaster victims and services.
- 4. You can request the AFAD provincial directorate in your region to create a data bank where this information will be collected before the disaster and emergency. Currently, there is no such system in our country. But this request will encourage institutions to think about this need.
- 5. If you need to evacuate your building after a disaster and Emergency, you need to reach the nearest gathering point. For this reason, find out the closest meeting point to your home at https://www.turkiye.gov.tr/afet-ve-acil-durum-yonetimi-acil-topkazan-alani-Query?harita=show and teach your child.https://www.turkiye.gov.tr/afet-ve-acil-durum-yonetimi-acil-toplanma-alani-sorgulama?harita=g%C3%B6sterhttps://www.turkiye.gov.tr/afet-ve-acil-durum-yonetimi-acil-toplanma-alani-sorgulama?harita=g%C3%B6ster
- 6. Create plans about what to do in the family during a disaster and emergency, and work on these plans with your child at certain intervals. Keep these plans in a visible place in your home.
- 7. Do work with your child on "Emergency Cards" about what to do after a disaster and emergency situation.
- 8. Put on the agenda the issue of using tracking devices that can track your child and communicate with you urgently. This may be a watch that s/he will carry around with him all the time.
- 9. Identify people in environments where your child is often present who will be an alternative to you to prevent your child from getting lost after a disaster and emergency, or to facilitate their discovery or evacuation. It's like a turnmate at school, a teacher, a neighbour at home.
- 10. Request "Emergency Evacuation Plans" from the institution in environments where your child is often located and work on these plans with your child on the spot.
- 11. Teach your child swimming and water safety skills.
- 12. The person responsible for individuals with special needs in times of disaster in schools varies according to school planning. First of all, classroom teachers, the floor officer responsible for coordination in case of disaster, and the assistant principal responsible for special education may be responsible for individuals with special needs. Check the disaster preparations at https://www.afad.gov.tr/afadem/afete-hazir-okul and talk to your child's school.https://www.afad.gov.tr/afadem/afete-hazir-okul You can share your child's information card with the person responsible for these plans at school.

# HOW SHOULD THE APPROACH OF FAMILY/CAREGIVERS BE AFTER TRAUMA? <sup>3</sup>

The mental upheavals of children with Down Syndrome and mental special needs after trauma and their reactions are like typical developing children. However, , their perception and impact of trauma will differ according to their cognitive levels and disabilities. They will have difficulty depending on their cognitive level in making sense of what they are experiencing and expressing their concerns. In such a case, , the age of intelligence should be taken into account, not the physical age when evaluating a child. In normal life, they will need more protection and support than their disabilities, and they will need more support from those around them and adults in the face of a traumatic situation. The extent to which children with special needs, both mental and physical, are affected by trauma is determined by the extent to which they are able to ensure their own safety. Children with physical disabilities may have concerns about protecting themselves. It will be easier for children with physical disabilities, who are raised by increasing their skills in proportion to their inadequacies, and who are given opportunities to practise, to cope with trauma. A visually impaired and hearing impaired child may have more concerns about receiving news and interpreting events around him. In this case, if their verbal expressions are good, they can tell their concerns and ask their questions and get answers, they can recover much easier. On the contrary, if they withdraw and move away from the environment, it will be more difficult for them to cope with the trauma. It is important that adults and parents nearby are very sensitive and vigilant about this.

The most basic intervention in the healing of trauma is that we can return to our normal lives as much as possible. A long-term education and continuous positive communication while raising our children, the fact that they can always get answers to their questions from us and their trust in us will make them stronger in coping with the negativities in the flow of life.

The main task of us elders in the face of an acute event such as trauma is to provide the safest environment possible, to surround them and be with them. It is important not to change your routine unless you have to

<sup>&</sup>lt;sup>3</sup> The author of the chapter is Prof. Dr. Şaziye Senem Basgul

Being able to return to routine protects from spiritual disturbance. As much as we have been able to adapt to this change, our children will be able to provide at that rate.

It is important that the child is able to express him/herself. It is very important to keep in touch with him as much as possible, to give short but clear answers to his questions in a language that they will understand.

Saying "nothing to be afraid of" to a scared child is an extremely unrealistic statement. It is necessary to understand and care about the feelings and thoughts of the child. It is very important to make him feel that fear is the result of the self-preservation behaviour of living beings and that it is extremely normal for him to be afraid. It will comfort him if you tell him that you are also afraid of yourself, but that you will help him to protect himself, that you are trying to find a solution, that you are there for him and that you love him. As a parent, it is very important to express our own feelings and concerns in a language that they can understand.

It is best not to let them listen and watch the news as much as possible. However, today, since social media allows children to access information very quickly, there may be serious difficulties in this regard. In such a situation, it should be clearly explained to him that the news can be presented by participating in comments, does not always contain accurate information, some images and news may negatively affect him, and he should be given confidence and honest that he will explain the events themselves in a language appropriate to his age and intelligence level.

The continuity of their education should be ensured. At this point, it will reduce the negative impact of the process, as well as reduce tension, if the family stays calm without panicking first, and supports the education of their children through daily living skills and self-care skills at home during periods when their children cannot go to education.

Apart from his personal characteristics, age and intelligence the child's ability to cope with traumas and life's difficulties is very related to how s/he was raised, what kind of education s/he received, how we communicate with him and how we approached him to become an individual before. It is not an instant situation. Of course, it will be difficult for children raised by parents who feed the child who can eat, dress the child who can dress, whose every job is seen by the parents without taking initiative, who are closed to communication and who control everything on their behalf, to cope with trauma. For this reason, we should always make them feel that our children are individuals, support their emotional growth and provide them with the appropriate environment and opportunities to increase their skills.

## MOBILE APPLICATIONS

During a natural disaster, there are quite useful mobile applications for people affected by the disaster or an acquaintance of the affected people. A few of these applications are introduced below. More different practices may also be researched. We should try to find the most useful applications for ourselves and our children and check whether their functions work at regular intervals.

# 1) AFAD EMERGENCY MOBILE APPLICATION

- It shows the nearest assembly area to your address.
- you can ask for help with 5 ready-made commands.
- It can give information to your relatives.

It is aimed with the Afad Mobile Project to receive the location and status information of the people affected by natural disasters via voice and message via data line and transfer them to 112 Emergency Call Centers, evaluate the situation in this centre and notify the field teams, and reach the affected people through the application.

Users, if they wish, can enter the contact information of their relatives to be reached in case of emergency, and enable the 112 Emergency Call Center personnel to see this information at the "Emergency Call", and when necessary, the relatives of the citizens can be accessed and the disaster victim's updated information can be shared. You can download the application for free via GooglePlay and Appstore by typing 'Afad Emergency Call'.

## 2) AKUTIAM SAFE

- There is a sound warning feature under the debris.
- The location and message can be sent to the specified people.

"AKUT I am Safe" application sends your previously recorded information to the people you have previously determined via text message (SMS) in case of natural disasters such as earthquakes, floods and informs that you are safe.

Considering that the networks will be busy in disaster situations, the most efficient feature of this application is that there is no need to have an internet connection to use the application. In case of disaster, a single button is pressed and your location is shared with the people you have determined. You can download the AKUT I am Safe app for free via GooglePlay and the AppStore.

#### 3) RED PANIC BUTTON

- It is necessary to purchase the pro version to access all services,.
- An application in English.
- The panic button can be placed on the phone screen as a "Widget".

"Red Panic Button" the application allows people to send SMS or e-mail to the phone numbers or e-mail addresses of the people they have previously identified by clicking on the red panic button on the screen of their location information in emergency situations. The red panic button in question can also be placed on the home screen as a 'Widget'. This makes it as easy as possible for people to access the red button in case of an emergency.

#### 4) BRIDGEFY ALERTS

Others in the immediate vicinity must have downloaded the app as well ror the app to work.

"Bridgefy" is an instant messaging application. It can be life-saving in cases of network problems during and immediately after a disaster.

The application uses the bluetooth feature of the phones for messaging. In this way, when the mobile network and Wifi are out of use, you can send a message to your friends who are 'Bridgefy' users who are close to you up to 50 metres using the bluetooth feature of the phone.

At this point, Bridgefy's message feature is very important. Thanks to this feature, every Bridgefy user distributes via bluetooth, just like a base station, so that others can send messages to those who are far away. Therefore, the more people use this application, the more its usage area increases. You can download the Bridgefy app via GooglePlay and the Appstore.

## 5) LIFE 360

• It is necessary to get it for a fee to use all its features.

Thanks to this application, you can follow the live location of your loved ones and acquaintances. You can instantly view information such as where the people in the group are currently, where they were last seen, charging status by creating groups in the application. You can download the Life 360 app via GooglePlay and the Appstore.

## 6) 112 EMERGENCY AID BUTTON

You can use the '112 Emergency Aid Button' mobile application prepared by the Ministry of Health to call an ambulance to your current location. In cases where you cannot make a phone call, this application can be a life saver. You can download the 112 Emergency Help Button application for free via GooglePlay and the Appstore.

# 7) WHISTLE/REAL WHISTLE

 You need to Click on the whistle picture to make a sound once, click on the "SOS" inscription to make a continuous sound

The application developed to help people who are under the debris in natural disaster situations such as earthquakes, makes it possible for people to give extremely loud warnings if they cannot make their voices heard. In this way, the phone begins to emit a high-pitched sound at the highest level. This helps search and rescue teams find people under the debris.

While the Whistle app can be downloaded to 'Android' devices, 'iOS' users can access the 'Real Whistle' app via the 'AppStore'.

#### 8) FEATURES OF IOS AND ANDROID OPERATING SYSTEMS THAT CAN BE USED IN DISASTER SITUATIONS:

- a. Android: There are features to automatically send your location or notify that you are in an emergency for phones with the Android operating system,. You can click here to learn more about the use of Android phones in an emergency.https://support.google.com/android/answer/9319337?hl=tr
  - Turning On Emergency Features: You can request help by pressing the power button 5 or more times in case of need for emergency help with the emergency aid features you activate from here. To take advantage of the emergency assistance features of the phone;
    - Open your phone's settings app.
    - Click Safety & Emergency > Emergency Help.
    - Select your settings.
    - Select your emergency assistance procedures.
  - ii. Automatically Send Your Location: When you call or text an emergency number (for example, 911 in the US or 112 in Europe), your phone's location can be sent to help first responders find you quickly. If the Android Emergency Location Service (ELS) is running in your country and on your mobile network, your phone will automatically send its location to the first responders if you do not turn off this service. Even if ELS is turned off, your mobile operator can send the location of the device during an emergency call or sending a message. To activate this feature on your phone;
    - Open your phone's settings app.
    - <u>Tap Location</u>, if you don't see Location, go to Security and Location > Location
    - Tap on Advanced > Emergency Location Service or Google Emergency Location
       Service
    - Turn on the Emergency Location Service.
- b. iOS: The iOS operating system also has emergency features that you can use by pressing and holding the volume or power key. You can click here to learn more about the use of iOS in an emergency. https://support.apple.com/tr-tr/HT208076#%3A%7E%3Atext%3DAcil%20servisleri%20aramak%20i%C3%A7in%20Acil%2Cot omatik%20olarak%20acil%20servisleri%20arar
  - i. Using Find My iPhone: The "Find" application makes it easy to track your apple devices, so you can easily find the locations of your belongings, friends or families. The "Find" app only works on iPhone, iPad and Mac and can be used even when your devices are offline To activate the application;
    - Open the Settings application.
    - Tap your name, then tap 'Find'.
    - If you want your friends and family to know where you are at that moment, turn on 'Share My Location'.

- Tap Find [My Device], then open Find [My Device].
- Open the Find Network to see your device even when offline.
- Open Send Last Location to send the location of your device to Apple when its battery is low.
- If you want to find the person using the device on a map, make sure Location Services is turned on. To do this, go to Settings > Privacy > Location Services and turn on Location Services.
- ii. **Location Sharing:** When Share My Location is turned on, you can share your location with your friends, family members and contacts on your iPhone, iPad or iPod touch using the "Find My" app. You can also share your location in the 'Find Contacts' app in watchOS6 or later using Apple Watches paired with your iPhone that have GPS and cellular capabilities. To make sharing your location active;
  - Open the Find app and select the Contacts tab.
  - Select Share My Location or Start Sharing Location.
  - Enter the name or phone number of the person with whom you want to share your location.
  - Select Send.
  - Choose how long to share your location by selecting one of the Share One Hour,
     Share until the End of the Day, or Share Indefinitely options, and tap OK.
- iii. **Using Emergency SOS on Iphone:** With "Emergency SOS" you can quickly and easily call for help and alert your emergency contacts. When you make a call with SOS, your Iphone automatically dials the local emergency service number. You can also add your own emergency contacts to these calls, except for the emergency service number. To do this operation;
  - Open the Health app and tap your profile picture.
  - Tap the Medical ID option.
  - Tap Edit and scroll down to Emergency Contacts.
  - Tap the "Add" button to add an emergency contact.
  - Tap a contact and then enter the person's affinity level.
  - Tap Done to save the changes.

# LIST OF ALL TRAININGS AND MATERIALS

All the trainings and auxiliary materials that need to be prepared are listed below.

- 1. Receiving personal information-Contact Information Card
- 2. Food safety and post-disaster hygiene training and cards
- 3. Hazard warnings training and cards (hazardous material plates, electricity, etc. warning signs)
- 4. Training and cards introducing the teams who will be on duty in the field after the disaster
- 5. Basic communication skills training, including alternative and supportive communication practices for teams in the field
- 6. Easy-to-understand and illustrated information brochures to be used by the teams after disaster and emergency,
- 7. Communication cards for those who cannot speak
- 8. Checklists prepared by making use of the document "What the Response Teams Need to Do After Disaster and Emergency Situation" can be used by the teams that will be in the field after the disaster.
- 9. Disaster and Emergency preparedness trainings and materials
  - a. Changes in the environment, risks and training to avoid risks (What may disturb us, what should we do in this case).
  - b. Food safety (spoiled food, clean water, finding safe food and water sources, etc.) and basic post-disaster hygiene training

- c. Training on what to do during evacuation (using stairs and elevators, finding exits, going to assembly areas, meeting family members, finding reference points according to their location and exhibiting appropriate behaviour)
- d. Appropriate behaviour training after disaster and emergency at school, workplace, shopping mall, street
- e. Training and cards for identifying and postponing our needs after a disaster and emergency.
- f. Training and cards to stay safe and avoid abuse (where to go, Who to trust, Protection from abuse)
- g. Training and cards for understanding the Disaster and Emergency situation, recognizing and distinguishing hazard warnings, and behaving appropriately.
- h. Disaster and Emergency notification training and cards.
- Disaster and Emergency notification and mobile applications that can be used after training and cards.
- Training to recognize the duties and uniforms of the teams who will be on duty in the field after a disaster and Emergency

## RULES TO FOLLOW WHEN PREPARING TRAININGS AND MATERIALS

- 1. The materials in this training should be prepared by the family and specialists at the appropriate level for people with Down syndrome. Illustrated, short, charts, instructions, checklists using words from everyday life, as well as slow-flowing, voice-over and subtitled videos can be used in the prepared materials.
- All materials, cards, instructions and trainings to be used by the teams should be accessible to individuals
  with Down syndrome. For this reason, prepare both audio, visual and easily understandable
  information. Please pay attention to the following information when preparing an easily understandable
  document for people with Down syndrome;
  - a. Prepare it on a plain white background
  - b. write not less than 14 pt
  - c. Support it in short and everyday language, with frequently used everyday words and images
  - d. Use standard fonts such as Ariel, Calibri, and do not choose complex, italic, handwritten fonts in documents.
  - e. Choose colours that are easily visible on a white background, such as black, dark navy blue, as the font colour.
  - First of all, if there are no real-life photos, use drawings or representative pictures.
- 3. Pre-writing risk communication messages that can be used in disasters and emergencies can be very useful for individuals with intellectual disability and autism spectrum disorder to prevent panic and reduce the possibility of creating confusion. The preparation of the message to be given in more than one form (written, pictorial, etc.) will provide convenience to the emergency personnel in order to determine the effective one among the messages to be used in emergency situations. Illustrated warning cards for such messages can be prepared by emergency personnel in order to provide ease of use. The points to be considered here are as follows:
  - a. Each picture card should contain only one message.
  - b. Picture cards should be as simple and understandable as possible.
  - c. Picture cards should not be too big to carry or too small to be visible.
  - d. Frequently known signs (for example, exclamation marks) should be used for warning purposes.
  - e. Picture cards must contain images and text related to the warning topic.
- 4. The information should be presented simply and clearly.
- 5. If the warning messages are not primarily real-life photographs, supporting them with drawings or representative images makes the message easier to understand.
- 6. Get feedback from people with Down syndrome about all the materials prepared.

# DISASTER AND EMERGENCY CONTACT INFORMATION CARD

The disaster and emergency card is a document that families can prepare for the accurate and fast transfer of information about people with Down syndrome to the teams in the field after a disaster and emergency. The information on this card is filled in by the families according to the information they want to give. This card has been prepared as an example.

Contact Information Card		
1.	Photograph of your child	
2.	Name-Surname of your child	
3.	T.R. ID number:	
4.	Your Home Address:	
5.	The Floor Where Your Apartment Is:	
6.	Phone Number of your child:	
7.	A sketch of the interior of your house (be sure to mark the state of the interior of your house). Take a photo of your street and mark your building in the	
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9. List the places where your child is often outside the home during the day. If possible, include the information in article "5" and "6" for each location.	
Address 1: Days and time interval where s/he is present:	
Address 2:  Days and time interval where s/he is present:	
10. Date of Birth of Your Child:	
10. Date of Birth of Four Child.	
11. Disability and specific sensitivities of your child according to this situation	
12. Blood type of your child: (Please be sure!)	
13. Chronic diseases of your child:	
14. The surgeries your child has undergone:	
15. Medications that your child use regularly if any:	
16. Devices that your child uses, if any:	
<ul> <li>17. For the operation of these devices need a source of energy</li> <li>17. If there is a need for an energy source for the operation of these devices, please write the type and model? (battery/electric etc.)</li> </ul>	
18. Things to be paid attention during handling these devices:	
19. The consumables it uses, if any:	

20. How to use these materials and what to pay attention to:	
21. Does your child need a companion when you are not present?	
22. Does your child need self-care support while you are away? Please explain to the relevant places below.	
a. Wear	
b. Toilet	
c. Bathroom	
d. Food	
e. Hand, face washing, Teeth brushing	
f. Other	
23. How can we communicate with your child? You can tick more than one option if necessary.	
<ul> <li>a. He can't speak and his comprehension is very limited. Please use a picture card.</li> </ul>	
<ul> <li>b. S/he can't talk, but s/he understands. Please use short sentences.</li> </ul>	
<ul> <li>c. S/he speaks and understands. Please use short sentences.</li> </ul>	
d. His speech is a little broken, please let him/her repeat sentences that you do not understand.	
e. Other (Please write)	
24. What are the things that can be easily obtained after a	
disaster that will comfort your child and help him/her	
cooperate? (For example, the food, drink, favourite	
music, toy, etc.)	
25. Contacts for your child <sup>4</sup> a. Mother's name-surname:	
b. Phone:	
c. Father's name-surname:	
d. Phone:	
e. Auxiliary contact person:	
f. Phone:	
g. Name-surname of contact from outside the city where you are located:	
h. Phone:	
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Share a copy of the Disaster and Emergency Person Information Card with the contacts and inform them that they can be called after a disaster and emergency.

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