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No one left behind – The accessibility of medical and psychosocial services following disasters and other traumatic events: Experiences of physical disabled individuals in Denmark

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Introduction

We are all vulnerable in times of disaster. Physically disabled (PD) individuals are particularly vulnerable and are frequently overlooked in situations of disaster (Handicap International, 2005). PD individuals are primarily divided into three groups: 1) wheelchair users, 2) ambulatory mobility and 3) respiratory (National Fire Protection Association, 2016). Wheelchair users are vulnerable because of their dependence on their wheelchair to move around. Problems when evacuating might arise if individuals in wheelchairs have to maneuver through narrow spaces, moving over rough or uneven surfaces or using toilet and bathing facilities in places not suitable for PD individuals (National Fire Protection Association, 2016). Other problems that might arise for individuals using wheelchairs are the potential need of a pair of heavy gloves to protect their hands or a situation where a tire might puncture, if they run over glass or debris. If it is not possible to continue the evacuation in the wheelchair, the PD individual has to be carried (City of Los Angeles Department on Disability, 2002). Likewise PD individuals in wheelchairs cannot seek shelter under tables as it is recommended in cases of earthquake nor can they evacuate quickly out of buildings with stairs (Server, 2015). These problems mean that wheelchair users usually are dependent on others in cases of emergency where it is necessary to evacuate.

People with an ambulatory mobility are not able to use certain limbs or coordinate their movements. Problems might arise if they have to walk, climb steps or slopes, stand for extended periods of times or reach and use fine finger manipulation (City of Los Angeles Department on Disability, 2002). People with respiratory issues may have difficulties in evacuating due to dizziness, nausea, breathing difficulties, tightening of the throat or difficulty concentrating. These people may require rest breaks while evacuating (ibid.).

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It is difficult to say exactly how many physically disabled individuals there are in Denmark. First of all, because there is no registration for physical disabilities in Denmark, and likewise it is difficult to give a precise definition of the term physical disabled. World Health Organization (WHO) estimates that approximately 10-15 percent of any given population has some sort of handicap (Danish Handicap Association, 2017). Of the 16-64 year old in Denmark, 26% reported a self-rated physical handicap (Centrale Handicap Advices, 2014). An examination from 2002, made by the Denmark State Bank showed that 744.000 individuals in Denmark between 15 and 66 years have long-lasting health problems or a handicap. This corresponds to every 5th individual in this age group. 6% had long-lasting health problems or a handicap in the 'arms or hands category', while the numbers were 10% for the 'legs or feet's' category, and 28% for the 'back or neck' category (Denmark's Statistic, 2002). More recent numbers showed an increase in the last three years in social services for individuals with mobility incapacity (Denmark's Statistic, 2017). According to the Danish Statistical Bank, there were approximately 4,200 individuals with a physical mobility incapacity that received social security (Denmark's Statistic, 2017).

An important piece of legislation for PD individuals is the Convention on the Rights of Person with Disabilities (CRPD), adopted by the General Assembly of United Nations on 13rd December 2006 (UN General Assembly, 2007). The CRPD provides the full range of rights for persons with disabilities, including during situations of armed conflict, humanitarian emergencies and natural disasters (Mittler, 2015). Denmark and many other European countries have signed and ratified the CRPD. In the context of post-disaster service provision, State Parties and public authorities have a responsibility to ensure that medical and psychosocial services are adapted to meet the specific needs of people with disabilities, including PD individuals.

Consequent to Denmark ratifying the CRPD, the Danish Emergency Management Agency is obligated to provide equal opportunity and accessible service to assist PD individuals especially in the events of disaster. Regarding the organization of local emergency responses to disasters and accidents, guidelines laid down by the Danish Emergency Service Act stipulate that local councils are responsible for providing reasonable assistance for personal injuries and property damage. This obligation also covers persons with disabilities (UN Committee on the Rights of Persons with Disabilities (CRPD), 2017). However, to be effective, post-disaster assistance should also promote the psychosocial well-being of survivors. First response, healthcare and trauma-informed aftercare services play a crucial role here. It is not currently known whether such services in Denmark are properly equipped to respond to the specific needs of PD individuals following disasters. Documenting the experiences of PD individuals of accessing these services is therefore crucial.

To our knowledge no Danish studies exist, investigating how PD individuals experience a traumatic situation and the services after the event. Moreover, we are aware of only a limited number of international studies on PD individuals exposed to traumatic events [Server, 2014; Smith & Notaro, 2009; Rahimi, 1993; Shpigelman & Gelkopf, 2017; van Willigen et al., 2002).

Methods

Participants

Disasters are relatively uncommon in Denmark, hence recruiting PD individuals with disaster experience proved difficult. We therefore expanded our recruitment strategy to include PD individuals who had experienced other critical situations (e.g. accidents, personal crises). A total of twelve (n=12) PD individuals were selected to participate in this study (Table 1). All were of Danish Nationality. The majority (n=9) were males. Participants' age ranged from 23 to 54 years. Five (n=5) were wheelchair users and five (n=5) were electrical wheelchair users due to either acquired injuries in accidents, sclerosis, osteoporosis, cerebral palsy or congenital disability. One wheelchair user also had respiratory issues. Two (n=2) had an ambulatory mobility. We recruited participant through several handicap organizations, Danish Handicap Associations (DH), via a workshop at the University of Southern Denmark, and through advertising on social media (e.g. Facebook).

Table 1. Summary of characteristics of study participants (n=12)

Pseudonym	**Sex**	**Age**	**Reason for physical disability**	**Wheelchair/Ambulatory disability/Respiratory issues**
Brian	M	40+	Working accident	Electric Wheelchair
Rasmus	M	40+	Sclerosis	Wheelchair
Simon	M	50+	Traffic accident	Electric Wheelchair
Oliver	M	30+	Cerebral palsy	Electric Wheelchair
Sebastian	M	30+	Congenital Osteoporosis	Electric Wheelchair and Respiratory issues
Birgitte	F	40+	Ehlers-Danlos syndrome	Ambulatory disability
Pernille	F	20+	Dysmelia	Ambulatory disability
Anna	F	60+	Congenital physically disabled	Electric Wheelchair
Mathias	M	40+	Broken spine due to accident	Wheelchair
Tobias	M	50+	Broken spine due to accident	Wheelchair
Søren	M	20+	Traffic accident	Wheelchair
Carsten	M	30+	Parachute accident	Wheelchair

*Ages are not precise for anonymity reasons

Materials

A semi-structured interview guide was developed by the authors. The first part identified a situation of crisis (e.g. daily crisis, catastrophes or terror) and included open-ended questions (e.g. "how did you react in the situation of crisis? Thoughts? Feelings?" and "how did you experience the professionals as experienced in helping physical disabled"). The second part of the interview guide focused on the individual's coping with the situation and possible psychological help seeking (e.g. "Has your life changed after the situation of crisis?" and "Where did you seek support after the situation of crisis? Family, friends, professionals?"). The third and final part included questions about future recommendations for professionals (e.g. "What should professionals be aware of in cases of rescuing people with a physical handicap?" and "What could emotionally hurt you in an attempt to rescue you?"). The participants were likewise encouraged to include any experiences, they might think were of relevance.

Procedures

Data collection took place between October 2016 and June 2017. The authors followed the Nordic ethical guidelines for psychologists. Prior to the interviews, participants were informed about the study objectives as well as issues of anonymity and confidentiality. They were also informed about their right to drop-out of the study at any time. All participants provided verbal consent to participate in the study. The interviews were conducted by the two first authors. Three of the participants were interviewed in a group. The others were interviewed on an individual basis. Interviews lasted approximately 1-3 h. The majority of the interviews took place in participants' homes or other places near (e.g. workplace, community center). All interviews were recorded on tape. The interviews were subsequently transcribed by the authors. We each reviewed the transcripts several times and identified key reoccurring themes associated with each category of research question. The authors discussed the themes during face-to-face meetings. Disagreements about themes were deliberated until consensus was reached.

Results

The main themes emerging from the analysis are presented in this section.

Category 1: Difficulties encountered during crisis situations.

One major complaint almost all of the PD individuals had in common was that there were a lack of guidelines and evacuation plans in case of emergency. None of the participants were familiar with any general recommendations or guidelines. Furthermore, in some cases when there was an evacuation plan, it had not considered the physics of the PD individuals and would not be effective or easy to carry out in case of an emergency. Another problem were that sometimes when equipment were addressed as handicap-friendly it might be useable for individuals with mild PD but not suitable for the individuals with more severe PD. One participant, Tobias, stated that putting a handicap-friendly sticker on something would not make it handicap-friendly. Several PD individual should have to try it out before it should be called handicap-friendly.

One individual experienced visiting his rehabilitation physiotherapist, that the evacuation plan were to get everybody up on a flat roof and thereafter they should climb down from a ladder. The roof was accessible through a door raised 35 cm from the floor, without a ramp.

> *"My physiotherapist said, 'You are not the problem. We will get you down'. But they did not know what to do with the electrical wheelchairs that weight 100 kg by itself. They had to rethink that. They had an evacuation plan, but it was not optimal!" (Søren, wheelchair).*

The majority of the PD individuals stated that they have to plan their entire day because of their disability. Despite the planning, many of them had not thought about their general emergency preparedness and lacked sufficient planning and thought in case of something unplanned would happen. Many of the participants believed that it was important to consider possible crisis-related situations, or at least have thought about what to do if an emergency emerged. However, several reported that they themselves were not ready in cases of an emergency.

> *"It is important that we think about what we are going to do and how I want people to react if I find myself in a situation of crisis. These are not pleasant thoughts but they are important to consider, because only when you are ready to die, you can truly live." (Pernille, ambulatory disabilities).*

A few PD individuals had discussed the issue of potential crisis with their helpers and relatives, and had stated that in cases of emergency the person had to save himself and not risking their own life in trying to save the PD individual.

> *"Then I came home, and I say to my husband. We have to talk about if something happens in the metro or something like that. Have you considered you may have to run and abandon me? Then he looks at me and says; We cannot do that! And I say; You might have to. What if we agree that is what I want you to do?" (Birgitte, ambulatory mobility).*

Instead of planning what to do in case of emergency, more of the PD individuals had the belief that everything would work out fine, even if they were not prepared. Almost all of the PD individuals who had 24 hours of help told that they were sure their helper could save them and therefore did not think about what to do if a crisis situation occurred. Anna states that "having the autonomy and freedom to do what you want is more of a priority than safety."

Some of the PD individuals describe that it can be difficult to make general recommendations on evacuation plans for PD individuals because there are so many different types of physical disabilities; a person with ambulatory disabilities and a person in an electric wheelchair does not necessarily require the same type and range of help. An extra problem arising for PD individuals who does not use a wheelchair is that their disability might be invisible. It might therefore be hard to gain the help they need. Pernille stresses out that she has a prosthesis which means she cannot run, this can be hard to understand for others in a crisis situation because the prosthesis is not so easy to spot.

> *"There are not two wheelchair users that have the same needs, and it is therefore difficult to put into a system […]. You have different needs, so it is important to listen to the individual needs instead of pinning them down." (Brian, electrical wheelchair).*

Because of the different needs, one PD individual, Mathias, described that if you make an evacuation plan based on the worst case of physical disability, then you are ready to help almost all types of physical disabilities in case of emergency. It might even be easier to evacuate the individuals whose disability is less severe because they might not need as much help as planned.

Many of the participants agreed that test evacuations are a good idea and can make a real evacuation easier, but they also underlined that test evacuation loses its purpose if the disabled individual are left behind because it is too difficult to include them. One individual in an electric wheelchair, Oliver, was left behind in a test evacuation at work and would stand inside and wave to his colleagues that had been evacuated to the ground outside. He emphasizes that in a test evacuation you find out the best possible way out and where you need improvements. It is also the time where you can agree upon who has to lift the person if it is not possible to bring the wheelchair. An ambulatory mobility individual, Birgitte, often experienced in school to be left behind in test evacuation situations because there were a lot of stairs that would take too long for her to walk down by herself and it was too difficult to help her down.

Another participant in wheelchair, Søren, experienced a fire alarm started in a museum. He was with another disabled man who was in an electric wheelchair The elevator did not work and when they got to the emergency exit there were five steps up to the door and no ramp. Søren could drag himself up the stairs, but his companion could not. When the staff arrived, they told him he had to leave the man in the electric wheelchair because they could not get him up the stairs.

> *“I told them that it did not work. They thought this was a kind of situation that they learned something from. Lucky for them it was a false alarm, because if it was not a false alarm, what would they have done? The man had his wife and children with him, but he was just to be abandoned. I told them they had to have a ramp and they answered they would take it into consideration. I think it should not be considered. It should just be done!” (Søren, wheelchair).*

Two of the participants have ideas could be implemented that could help PD individuals in crisis situations. One participant, Pernille, suggests that in public places there could be a giant yellow pillar where PD individuals, in case of emergency, could go and find help from someone who had been educated in how to help PD individuals. Another participant, Tobias suggested there could be an extra high table in case of earthquake where a person in a wheelchair can drive under or a table that can be raised or lowered.

One of the participants, Mathias, told that the law describes that ramps have to be 4 meters wide and that the slope has to be slow rising. Both he and other participants thought that in an evacuation situation it does not matter that much if the slope is a little bit steeper or the ramp a little bit narrower, as long as a wheelchair can get up and away from the danger. A ramp gives a chance to escape where no ramp can make it almost impossible for some disabled individuals to get evacuated. Making buildings more handicap-friendly is not something that necessarily cost a lot of extra money. Anna described that when the new building for The Danish Handicap Associations were built, they focused on making it handicap friendly. This resulted in a building where it was easier for PD individuals to escape from in case of evacuation with elevators working even in case of fire. This project ended up costing the same as if the building was built without the extra consideration for PD individuals.

Category 2: Reactions under and after crisis situations

The PD individuals' reactions under crisis situations ranged from freezing completely to getting very engaged in sorting out the problem. Some of the individuals had a hard time asking for help while others just wanted their lives prioritized and help to get away and survive, and things like wheelchairs and the risk of broken bones came second. A PD individual, Mathias, stated that the only thing that you can do in situations of crisis, where you as an individual dependent on your wheelchair that cannot evacuate yourself, is to scream for help and pray that someone comes for your rescue.

The reactions after the crisis situations ranged as much as the reactions under the crisis situation. Some of the individuals became more watchful while others were not affected by the situation. None of the participants saw a psychologist directly because of reactions arising after a crisis situation. Instead some of the participants sought out help from other PD individuals, who had already faced similar situations, and described how it can be helpful to talk to people who can relate to your situation. One individual, Rasmus, told that the happiest and most positive PD individuals and those who share the most experiences were the ones who had been physically disabled the longest.

> *"A psychologist can never say: I know how you feel, because they cannot understand. I was offered help from a psychologist right after my incident, but I said no. I would rather talk to another physically disabled person or other individuals in the same situation as me than with a psychologist." (Søren, wheelchair)*

According to several PD individuals thinking about emergency situations can be too negative of a thought, which makes them more prone to try to think more positive thoughts and avoiding the negative. Some of the participants described that the general PD individual starts of by being negative when he/she first receives the news about being disabled. Later most PD individuals become more and more positive as he/she learns to live with the disability.

> *"You can get sick of it, if you always have to think about all the negative stuff and what might happen. It is always the family that worries more about what might happen. It is only a problem if you make it a problem" (Søren, wheelchair)*

However some PD individuals are still denying that they have a disability or that their disability makes them different from everybody else. They are trying to live their lives as normally as possible without considering the disability.

> *"I am just like everybody else. I am not disabled. I might be in a wheelchair but I am not disabled. (Sebastian, wheelchair)"*

Category 3: Interactions with healthcare services.

Some of the PD individuals tell that they have encountered hospital personnel that lacked both empathy and knowledge about differences between physically disabled individuals and individuals without physical disability. Birgitte always felt she got too much attention because of her rare disease; when she is hospitalized a lot of extra doctors are entering her room just to watch. She does not feel the doctors are taking her feelings into consideration. Brian have also experienced doctors that lacked empathy.

> *"The first doctor I talked to when I woke up after surgery, the first words from him was 'do not expect to be able to move more than you can now'.*

> *That was harsh. It was not what you needed to hear as the first thing after waking up. […] After five to six days I complained about pains in the middle of the night. A doctor comes in and the first thing he says is 'Sit up straight so I can listen on your back'. (Brian, electrical wheelchair).*

Simon have experienced how a lack of knowledge about PD individuals can result in more damage than healing when getting treated in the hospital. After breaking a leg the doctor put on a cask that resulted in a wound that worsened his condition more than a broken bone.

> *"When you cannot feel anything, you must not put on a cask. First time I broke my leg they treated me like everybody else. They put on a cask and before I could convince them that I should not have a cask on, and the chief of surgery convinced them, 14 days had passed, and I had gotten a pressure sore on the heel that took over a year to heal. […] You have to think different when you are paralyzed. They did not take that into consideration, it was very problematic." (Simon, electrical wheelchair).*

Furthermore, several PD individuals stated that their own expertise on their disability was not being taking into consideration by the hospital's social offices. Most the staff was trying to lecture about the disability but no one seemed to have the time to listen to what experiences the PD individuals had themselves. One PD individual, Birgitte, stated that when she tried to offer ideas to better solutions on how to improve at the hospital, she was ignored because of the lack of resources.

All the individuals who had a handicap helper, said they often experienced that when encountering new people, they often communicated with them through their helper. The newly encountered people assumed that a physical disability was equal being totally disabled and not able to have a conversation with. Therefore the PD individuals had to tell that they are fully able to communicate themselves. They pinpoint the need to feel autonomy even though they need help. Likewise, the PD individuals underpinned the importance of remembering the person behind the handicap and remember to show empathy and not just sympathy. They need information about the evacuation like people with no disabilities.

> *"I have experienced a couple of times that I am out shopping in places I have not been before and I have my helper along, people tend to com-*

> *municate to the helper and not me. My helper tries to explain that I am the one they should talk to. Sometimes we act like we do not know each other and thereby forcing the employers to talk to me. It is just because people do not know better" (Sebastian, electric wheelchair).*

Category 4: Municipality problems

Several PD individuals have had different experiences in services provided from the municipalities. It varies a lot from municipality to municipality how much help they will grant a PD individual and how hard the individual has to fight to get the things he is legally entitled to.

One participant tells that first of all there are too many small laws and regulations and that you as a PD individual have to know exactly what you are entitled to; otherwise you will perhaps not get what you need. Therefore many PD individuals state that you have to be socially skilled and know how to provide the best arguments.

> *"Some municipality offices are totally insane. They are trying to save money on everything, and people are not getting the most basic stuff. I know someone who could not get granted something they needed, so they moved to a different municipal and got a handicap car. It is not fair that some people get everything they need and things they don't need, while 10 others do not get the most basic stuff for their disability. There is a lack of guidelines." (Mathias, wheelchair)*

When the municipalities have budget cuts it can have serious influence on the PD individuals. Simon experienced in his municipality that his help service was reduced from 20 hours a day to 11 hours a week. Because of this he did not get help getting turned around at night to avoid bed sores, which resulted in pressure ulcers and later blood poisoning. He ended up staying at the hospital for 9 months because of this. Afterwards when he moved to another municipality he got back his help 20 hours a day. Another PD individual, Birgitte, feels obligated to equip herself with several helping devices such as collars, walking sticks and knee shin pads when going to meetings with her social worker at the municipality, even if she doesn't need those specific helping remedies that exact day. When Birgitte is wearing her remedies, she experience that the communication is easier and that the social workers understand that she has a handicap even though you might not see it without the helping remedies. Birgitte once took a test that concluded she needed help at home, and the municipality urged her to apply for help. She has applied more than once because she kept getting rejected because she was married and therefore had a spouse that could help her. One time she was granted help to clean the house, but this was retracted when they found out they made a mistake and that she was married.

> *"The municipality office says that the test concludes that you need help in your home, and encourages to apply for help. Then you do that and get rejected because you are married and have homebound children. The municipality office knows this […]. If I was to file a divorce, and live by myself and still had homebound children, then I could get all the help I need. But I am so silly that I am married." (Birgitte, ambulatory disabilities).*

Recommendations

This is the first study to investigate barriers faced by PD individuals in Denmark when accessing medical and psychosocial services following disasters and individual traumatic experiences. The use of semi-structured interviews enabled us to gain an in depth understanding of participants' experiences.

Regarding difficulties encountered during interactions with healthcare professionals, all of our participants expressed concerns about a lack of guidelines for evacuating PD individuals in situations of crisis. This finding is consistent with those of previous international studies investigating PD individuals' experiences with evacuating (Server, 2015; Shpigelman & Gelkopf, 2017; Van Willigen et al., 2002). Test evacuations is a good way to prepare how to evacuate, but even though it makes the evacuation longer and more difficult, it is important to include the PD individuals as it will not be any easier to evacuate them in a real danger situation.

It should be considered that there is a lot of different handicap, and that the healthcare professionals should be aware of the special individual needs. Likewise it should be mentioned that PD individuals react differently in different situations of crisis. Participants in electric wheelchairs specify that their wheelchair is extremely important for them to bring along, because if they leave their wheelchair they will be absolutely helpless, whereas this is not so important for the participants in non-electrical wheelchairs. It is important to remember that PD individuals with different disabilities can have very different needs in cases of crisis. Therefore it is should be considered to make guidelines for the PD individuals with more severe disabilities, because this can ease the evacuation also for PD individuals with less severe disabilities.

Another important point is that PD individuals should prepare themselves and talk with their family and friends about what to do if a crisis situation occurs. Some PD individuals might take for granted that their helper will evacuate them in times of crisis, and it is therefore important to talk about the different expectation the PD individual and the helper might have.

Some participants felt that healthcare professionals lacked knowledge about the difference between treating PD individuals and non-PD individuals. This lack of knowledge can lead to more harm than good when treating PD individuals. Some of the participants experienced that the healthcare professionals showed limited empathy and did not listen to the recommendations the individuals presented afterwards.

Furthermore the PD individuals experienced that several times the healthcare professionals and other professions did not communicate directly with the PD individual but with the helper. It is therefore important that healthcare professionals are instructed in the differences between treating different PD individuals and non-PD individuals and not just leave this information for the specialized doctors. It is also important to show empathy and maybe consider the help PD individuals offer when they come with ideas and support in how to improve the treatment of PD individuals.

As a PD individual living in Denmark, you have to consider which municipality to live in, as it is very different from municipality to municipality how hard it is to get help services. Likewise, you as a PD individual have an obligation to know the laws and what you can demand otherwise it can be a hard to get the help you need. More general guidelines on what PD individuals have the right to could improve living standards and quality of life for some PD individuals.

Therefore the following could be considered when making guidelines for PD individuals:

Recommended Guidelines

- Guidelines for the municipality and the government
    - Make general recommendations for PD individuals in case of evacuation.
    - Make it easier and more equal for PD individuals to get access to the help they need.
    - When planning a new building, consider making it easier for PD individuals to escape.
    - Place more ramps in places where it can be difficult to evacuate a PD individual.
    - Information campaigns about how to offer help to PD individuals in evacuation situations.
- Guidelines for Healthcare professionals
    - Extend the knowledge about differences in treating PD individuals and non-PD individuals.
    - Remember there is a person behind the handicap and show empathy.
- Guidelines for evacuation
    - Extend the knowledge of how to evacuate PD individuals in situations of crisis.
    - When evacuating a PD individual, inform them about what is going to happen.
    - Include the PD individuals in the test evacuations.
    - Bring their wheelchair if possible.
    - Remember not all disabilities are visible.
    - Make space on the road and to evacuation buildings so people who are in a wheelchair or are inhibited can make their way through.
- Guidelines for the PD individuals
    - Be informed about the evacuations possibilities.
    - Prepare an emergency preparedness kit (e.g. gloves, support bandages, etc.).
    - Talk to friends and family about what to do in a crisis situation.

- Guidelines for caregivers and families
    - Emergency preparedness training.
    - Respect the autonomy of the PD individual.

The limitations of the present study are acknowledged. The reliance of this study on convenience sampling and its small sample size restrict the generalizability of the findings. In addition, our study sample consisted of PD individuals that all were mentally well functioning in their daily life. All the PD individuals were of ethnical Danish nationality and had an average to above socioeconomic status. It is possible that the experiences reported by our participants present a more positive depiction of healthcare service provision following disasters and other traumatic events than those of the target population at large. Because it is not a common thing in Denmark to experience disasters the current article present a picture of less severe traumatic experiences and might not show the same results as if it was conducted with more severe traumatic experiences.

While some of our recommendations may also apply to the provision of services for other PD sub-populations future research is still needed to yield additional recommendations. Furthermore, since the scope of this study was limited to investigating the perspectives of the PD individuals on the accessibility of services typically responsible for responding to disasters, future research should inquire into their perspectives on emergency preparedness initiatives implemented in Denmark as well as in other countries. Our recommendations are consistent with some of the Key Recommendations for Supporting Persons with Disabilities in Disasters from Austria (Juen et al., 2016) and the Emergency Evacuation Planning Guide for People with Disabilities from America (National Fire Protection Association, 2016). Because it is uncommon for disasters to happen in Denmark, some of the recommendations from other countries seem unnecessary, but it is still important to consider if they should be implemented in Denmark as well.