

Introduction – Down's syndrome occurs in children as a result of them being born with an extra chromosome. This is something that happens by chance and does not occur as a result of something that happened before or during pregnancy. Children born with down's syndrome will have some level of learning disabilities where it may be mild or server. This will then depend on the amount of support is needed and their level of independence. Children with down's syndrome like everyone, have their own unique personalities, like and dislikes and qualities that make them who they are. (NHS, 2022).

Identification and diagnosis – There are a couple of ways that down's syndrome can be identified and diagnosed; one way is to analyse the children's chromosomes. This is carried out by taking a sample of the placenta of the foetus between 10 and 13 weeks of pregnancy however, this is done with permission from the parent as this form of analysis comes with a small chance of miscarriage or birth defects as a result this form of identification is usually only offered to mothers who are deemed high risk of having a down's syndrome baby. (Mayo Clinic, 2022). In England and Wales expectant mothers are more commonly offered screening tests at prenatal appointments, this involves examining blood taken from the mother. (Down's syndrome association, 2020). Roizen and Patterson, 2003 suggest that prenataly there is also the option to detect an unborn baby have down's syndrome through the prenatal scans. This is done by measuring the nuchal fold and determining whether there is a thickening. This option of identification has been found to be approximately 85% effective in diagnosing an unborn child with downs syndrome. Even though different types of screening are available to help potentially identify downs syndrome the only prenatal way to diagnose is to as stated above taking a sample of the baby's placenta; this process is called chorionic villus sampling. (NHS, 2022). A diagnosis of Down's syndrome after birth is usually identified by the physical signs. The physical signs of down's syndrome include: a short neck with excess skin on the back of the neck, them having a flattened facial profile and nose and a small head, ears and mouth. (National Institute of child health and human development, 2017).

Barriers and challenges – All children with Down's syndrome will have some aspect of a learning disabilities however, this will always be different for each individual. Children with Down's syndrome can sometimes be delayed in reaching certain milestones which is why receiving the right support is paramount (Mencap, 2022). One of the main challenges a child with down's syndrome can face is the strong chance of experiencing hearing loss at some point in their lives but usually during their childhood. This is usually down to the facial structures of children with down's syndrome often involving the children to be born with smaller heads and ears which therefore has a result of their hearing being impaired and in some cases blocked by fluid. (Down's Syndrome Association, 2018.) The importance of children having good hearing is crucial for all children's development, good hearing helps children to think, speak, read as well as developing academically and socially. (ASHA, 2022). It is estimated that approximately 65% of down's syndrome children have some form of hearing loss throughout their lives. Because of this children with down's syndrome often have trouble understanding and communicating with others and this becomes a substantial barrier within their development. By aiding these barriers it will allow the children to develop their key skills within their language and social development and although key milestones may be delayed there is the possibility through opportunity and support to reach them later on in the childhood. (Down's syndrome association, No date).

Strategy – It has been proven that children with Down's Syndrome have stronger receptive language skills than expressive language skills. A form of communication which has been beneficial in the lives of Down's Syndrome children is that of Makaton. Makaton 2022, Children with Down's syndrome often like to use the Makaton signs and symbols with some speech to help them to be able to communicate. The signs and symbols can be used by the children to help others to understand them more clearly if they have little speech or they can be used solely as a way of communication if the child with Down's syndrome is non verbal. Foreman and Crews, 1998, has found that the views of using Makaton by parents is that of a mixed review. There is much evidence to prove that the use of Makaton has positive outcomes however, some parents thoughts were that they were worried that if they were promoting the use of Makaton then their children's verbal language development will suffer as a consequence. However, new research by Kendall, 2017, suggests that communication programmes including Makaton are used to aid the language gap, develop language and comprehension as well as helping t develop children's speech and language.

Conclusion – Throughout my research of this academic poster I have found the subject of Down's Syndrome very interesting. While Down's Syndrome is something that I have been aware of I have never researched it in as much detail as I have during this activity. I have been able to expand my knowledge on Down's syndrome by finding out how children are diagnosed and the ways and procedures that this is done. I feel that I have gained extensive knowledge on the subject while understanding the challenges that children with downs syndrome face as well as just some of the ways to best support them.

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