Abstract: This research on deafblindness is the first official research done in Thailand. The first collection was 130 cases, selected from 14 deaf and blind institutions. Later, 35 cases from 8 places, age ranging from 7-60 years old, were used in this study. The survey was done by questionnaire, consisting of 37 questions constructed by the researcher. Questions were asked directly to the clients by the researcher, using one sign language interpreter throughout the study. In case the communication failed, collection of data was obtained from parents; teachers or caregivers of the clients. Clinical examination and findings were obtained from eye and ear specialists. Results on their needs and their problems were obtained after the clinical examination was finished. Data analysis was calculated in percentage. Later, results were used for counseling guidelines.

Most cases were selected from schools for the deaf (62.86%) with age ranging 11-20 years (60.0%). Sex ratio between male and female is 1.9 and 1.0. Cases who had congenital deafness-adventitious blindness (CD-AB) were 17 (48.58%), congenital deafblindness (CDB) were 16 (45.71%), and congenital blindness-adventitious deafness (CB-AD) were 2 (5.71%). According to the research the causes of deafblindness, were Maternal Rubella 9 cases (25.71%), Usher syndrome 6 cases (17.14%), and premature birth 1 case (2.86%). Cases that were able to orally communicate were only 2 (5.71%), using sign language were 20 (57.14%), and using only gestures and body language were 16 (45.71%).

The questionnaire is divided into 4 groups based on deafblind people's needs. In the medical area (1) they wanted to have annual eye and ear examinations once a year (40.0%). (2) They needed low vision devices 14.29%, (3) and they needed hearing aids 8.57%. In the area of education, they needed (1) education and training to be an independent person 40.0%, (2) they wanted to study in an informal education program 11.43%, (3) they wanted to extend their college education at Ratchasuda College 5.71%, and they felt they had no need for further education beyond grade 6th 2.86%. In the area of social needs, they wanted to be well accepted by non-disabled people 80.0%, needed budget for training and education 51.43%. According to vocational training, they needed job training 17.14%, and to have their own private job 14.29%.

The report of their problems state that they are (1) lacking a deafblind interpreter 100%, (2) and have problems in communicating with non-disabled people 85.71%, (3) the problem with poor attitudes of non-disabled toward the deafblind group was 91.43%. They felt there was an attitude and belief that deafblind cases are unable to be an independent person 57.14%. There was a problem and misconception that the deafblind are mentally retarded people 31.43%. Other problems mentioned were a lack of specialized teachers for the deafblind 71.43%, and that the Thai government have never had a policy on deafblind rehabilitation 28.27%.

Suggestions for further studies are, (1) to increase surveys on deafblindness. (2) A preparation on the rehabilitation process and services as well as the Individualized Education Program (IEP) for
Introduction

Moment to moment, our vision and hearing give us the information we need to continuously expand our knowledge and to interact with the world around us. Vision and hearing provide individuals with a wealth of learning experiences. Difficulties in either seeing or hearing alone have a great impact. An individual with a hearing loss must use vision to help compensate for the lack of available auditory information. Deafness hinders individuals' abilities to hear sound: voices and conversation, music and environmental sounds, and sounds that provide awareness of immediate events. Similarly, an individual with a vision loss must use hearing to help compensate for the lack of available visual information. Blindness hinders individuals' abilities to experience every day things such as independent movement, color, shape, and symmetry; and the activities that vision normally facilitates. When both vision and hearing are affected, this type of compensation cannot occur, and adequate and consistent amounts of sensory information are not available. This results in varying degrees of sensory deprivation, which occurs on a continuous basis, day after day, year after year.

Individuals, who have combined vision and hearing loss or deafblindness creates unique problems of communication, mobility, and learning that often result in intense isolation and loneliness for many individuals. Because 95% of what we learn about the world comes through our vision and hearing (Sense, 2002: 1). The child with deafblindness misses much essential information, and incidental learning is greatly limited.

The word deafblind is written in a connected way and not as two separate words "deaf blind", because a unique condition is at stake here, one not merely caused by a combination of deafness and blindness (van Dijk, et al., 2002:1).

Deafblindness is a low-prevalence disability that creates serious barriers to inclusion and full participation of the individual in community, social, and work life. Critically, the individual with deafblindness will have limited opportunity to communicate with a variety of people, access information, develop meaningful social relationships, orient to, and move about the environment. Individuals with deafblindness are a diverse group with a continuum of needs, which vary depending upon the age of onset of deafblindness, degree of sensory loss, presence of concurrent disabilities, and environmental conditions.

In the United States, the 1992 census report estimated 7,839 children and other youth who are under age twenty-two years who meet the federal definition of deafblindness (Bagley, 1992 cited in Orto & Marinelli, 1995: 234). It is estimated that there are 30,000 to 45,000 individuals in the United States who are deafblind (Watson, 1993). In addition, a study by Teaching Research Division at Western Oregon State College has identified over 5,000 children and youth. It is estimated that this number could be as high as 1,000. It is generally believed that dual sensory impairment occurs in 3 of 100,000 births (JCA Unlimited Design Studios, 2000: 1). In the year 2001 we found statistic from Los Angeles Time newspaper stated that

Key Word : Deafblind
the population of the United States was 248.7 million but failed to report number of people with disability. If we use the above ratio of deafblind 3:100000, it should be estimated that in the year 2001 there should be at least 7,461 cases of deafblind all over USA.

In the UK, it is estimated over 21,000 deafblind people (The Nation Deafblind and Rubella Association, 1988 cited in RNIB challenging blindness, 2000: 1). Statistical analysis in Thailand for deafblind case still not available till today.

With question on causes of deafblindness; rubella, CHARGE association, Usher syndrome, genetic disorders, accident, and illness are some of the common causes (The Arizona Deafblind Project, 2001 : I ). The main causes of deafblindness are premature birth, birth trauma, and host of genetic conditions including Usher syndrome, where a child is born deaf and loses their vision in their teenage years of life (Sense The National Deafblind and Rubella Association, 1999: 1).

Four critical factors which effect the severity of deafblindness on the child and his development are:
- degree and type of vision and hearing loss
- stability of each sensory loss
- educational intervention provided (The Arizona Deafblind Project, 2001 : 1-2).

Deafblindness is defined by The Individuals with Disabilities Education Act (IDEA of United States) as, "concomitant hearing and visual impairments, the combination of which creates such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness" (Federal Register, 1999 cited in Alsop, et al., 2000: 1).

Planning services for this unique group of people requires sensitivity by the service delivery system to the individual issues specific to deafblindness, and the creation of alternatives to services that have been traditionally provided for individuals with other disabilities.

With in the deafblind population, there are many variables that must be taken into consideration in order to provide individuals with services and supports best suited to their needs. Not all individuals who are deafblind are both totally deaf and totally blind. Many have varying degrees of useful residual vision or residual hearing. They very greatly in their degree of education and experience, their skills in communication, and their understanding and potential.

In conclusion, deafblind children and adults require services specially designed to meet their needs. In seeking to enhance the quality of life for deafblind people and help them become as independent as possible.

**Picture of Deafblindness in Thailand**

In the developing countries there is very little awareness about deafblindness and virtually no appropriate services. Hundreds of deafblind children therefore remain in isolation at home or institutions (Sense The National Deafblind and Rubella Association, 1999: 1).

Before the year 1989 (B.E.2532), deafblind cases in Thailand have not been mentioned at all in the educational rehabilitation services. There are small number of case found in the eye and ear clinics where doctors would followed up the case and helped them to get some medical rehabilitation such as the use of hearing device and the fundamental visual aids. It may be said that those cases were left at home and
some institutions without chance to receive an official training toward the independent living. Dr. Poonpit Amatyakul (2000) said from his clinical experience that, he found several cases of congenital deafness in the school for the deaf whom later became severe low vision, those kids had dropped and went out of school after the they could not read from the blackboard and the medical treatment were not satisfied by the patient as well as the family needs.

As a matter, of fact, several deafblind cases are commonly complicated with mental retardation and other disabilities such as microcephaly, thus, those case were kept in the back of the house or they were admitted in a lifetime institutes of people disabilities which was under the control of the government department of welfare.

Presently in Thailand, some considerable attention is being directed towards the development of educational and vocational programs and services to meet the needs of deaf people and blind people. But in the field of deafblindness (however), there has not yet been any significant development for services to children and young adults who are deafblind. There are only a few schools have provision to cater for those children as a multiple disabilities. Unfortunately, the Ministry of Education of Thailand has no record of having ever provided special educational services to students with deafblindness. Since 1989 (B.E.2532), the Hilton/Perkins Program has supported Thailand by sending teaching specialists to some schools and villages in the northeast and some institutions taking care of multiple disability in Bangkok areas. Recently, there has been some movement to develop deafblind and multihandicapped children in the northern school in Chiang Mai. And later in Lampang and Lop Buri provinces. As a matter of fact there are very few services for children with multiple disabilities in Thailand as well as services for deafblind children and the multisensory impairment (Suwimon Udompiriyasak, 2000: 1).

Since Thailand is now in the beginning era of deafblind service, the researcher is interested in the study of deafblindness. First, we wanted to find out how many deafblind cases that are available for the study and where are they living at moment. Second, what are their medical, and social problems and their needs. Thirdly is concerned with the rehabilitation counseling.

With this study we hope to bring the better understanding with the deafblindness, their independent living, human rights and services for them.

Objectives of the Study
For this research study, the researcher will work with the deafblind cases that can be found in some institutions where deafblindness are reported and lived in such institutes. The objective of this study are as followed:
1. Medical findings of the deafblind cases.
2. Their needs and problems.
3. The guidelines for rehabilitation counseling.

Scope of the Study
1. The selected case for this study must be the registered case that defined with the law as described in the Rehabilitation of Disabled Persons Act B.E. 2534 (A.D.1991).
2. Cases will be selected from institutions (government and non-government) whom the director of the institute reported cases with problems of seeing and hearing difficulties. The institutions are among schools of special education such as schools for the blind, school for the deaf, institution of children with multiple disabilities and etc.
3. Cases in this study must be completed examined and reported by medical and paramedical specialists. They are ophthalmologist, otologist, optometrist, and audiologist (speech pathologist may be consulted in some case).

Definitions and Terms used in this Study

1. **Communication**: Any means by which an individual relates experiences, ideas, knowledge, and feelings to another, including speech, sign language, gestures, braille, and writing.

2. **Daily living skills**: Skills that enable a person to perform routine activities necessary to live independently. An example feeding and eating, dressing, grooming and hygiene, and toileting.

3. **Deafblindness**: Concomitant hearing and visual impairments, the combination of which can create unique communication, development, social, emotional, physical, and learning needs.

4. **Gestures**: Movement of any part of the body to express or emphasize an idea, emotion, or function; does not include formalized symbolic methods of communication, such as fingerspelling, signed English, or American Sign Language.

5. **IEP (Individualized Education Program)**: A written plan of instruction by a transdisciplinary educational team for a child who receives special education services that includes the student's present level of educational performance, annual goals, short-term objectives, specific services needed, duration of services, evaluation, and related information.


7. **Night blindness**: A condition in which visual acuity is diminished at night and in dim light.

8. **Nystagmus**: Involuntary, usually rapid, movement of the eyeball: horizontal, vertical, rotary, or mixed.

9. **Orientation and mobility (O&M)**: The field dealing with systematic techniques by which blind and visually impaired persons orient themselves to their environments and move about independently.

10. **Problems and needs of deafblind people**: Problems and needs in daily living and service of deafblind people in 4 parts as those:

   - **10.1 Medical**: Service in medical to cure disability, rehabilitation, prevention or complication from disability, equipment or supporting machine for disabled people, and instrument disability.

   - **10.2 Education**: Service in education characteristics of department and lesson appropriate the disabled people. Although the opportunity of care get from another service etc.

   - **10.3 Vocation**: Service in practice/rehabilitation vocation depend on department of practice vocation, characteristics of working is appropriate the disabled people, service of counseling, cost and money for working etc.

   - **10.4 Social**: Service in taking care, solving problems, daily living skills, and adaptation to other persons. Although the social accept the ability of disabled people etc.

11. **The deafblind person**: Individuals, who have combined vision and hearing loss under the Law "Rehabilitation of Disabled
Persons Act B.E. 2534 (A.D.1991)”.  

12. **Retina**: The innermost layer of the eye, containing light-sensitive nerve cells and fibers connecting with the brain through the optic nerve.  

13. **Rehabilitation institutes**: Department for rehabilitation of disabled persons about medical, education, social, and vocation. Each department may not give rehabilitation cover 4 parts as the Nakhon Pathom Special School, Ram-Intra Home of Children with Multiple Disability, Pattaya Redemptorist School for the Blind, Songkhla School for the Deaf, Anusan Suthon School for the Deaf, Tak School for the Deaf, Mukdahan School for the Deaf, and Roi Et Center of Education and Rehabilitation for the Blind.  

14. **Retinitis**: An inflammation of the retina.  

15. **Retinitis pigmentosa (RP)**: Hereditary degeneration and atrophy of the retina. Symptoms include night blindness and progressive contraction of the visual field.  

16. **Retinopathy of prematurity (ROP)**: A common cause of blindness in premature infants, caused by exposure to high concentrations of oxygen at birth and leading to retinal detachment and various degrees of vision loss.  

17. **Syndrome**: A group of symptoms that together are characteristics of a specific disease (Webster’s Desk Dictionary of the English Language, 1990: 909).  

18. **Visual field**: The area of physical space that is visible when the body, head, and eyes are in a stationary position.  

**Expected Outcomes**  
1. The understanding of characteristic of deafblindness.  
2. The understanding of severity and complication of deafblindness.  
3. The understanding of problems and needs of deafblindness.  
4. The use of research result as suggestion and guidelines for individuals involved in providing services and counseling for deafblind people.  
5. To provide public understanding with deafblindness in Thailand.