

## The Prevalence of Children with Special needs In Inclusive Elementary Schools in Iodine Deficiency Area

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### ABSTRACT

**Purpose:** *In general, this research aims to recognize the prevalence of CWSN in inclusive elementary school in the iodine deficiency area. The findings of this research are expected to be proceeded to the intervention programs that enables teachers to help CWSN education in inclusive elementary schools in iodine deficiency area.*

**Method:** *The research approach uses descriptive study which is conducted in 57 inclusive elementary schools with school requirements: (a) the school has a Decree of the local Education Authority as a school for inclusive education, (b) there is a child with special needs (CWSN) in this certain school, and (c) the school has had a special teacher for CWSN. Collected data includes: (a) the number of CWSN according to class, gender and classification, (b) inclusive school teacher profiles and required teachers for inclusive education implementation for CWSN. The method of collecting data for CWSN and their classification using a screening method with screening instruments needed from Directorate of Special Education and Special Services Ministry of National Education in 2010. While the teachers data profiles are collected by questionnaire method developed by researchers. The validity of this data collection instruments is using content validity with expert judgment. Data analysis method is using percentage quantitative-descriptive technique.*

**Findings:** *The results can be concluded that: (a) the type of slow-learning CWSN most followed by child learning disabilities, mild mental retardation, behavior disturbances, autistic, physically disabled, visually impaired and deaf-mute, (b) most of the teachers need guidebooks and inclusive education technical guidance, compensatory services and curriculum modifications, learning and assessment of learning outcomes in inclusive schools of CWSN.*

**Keywords:** *children with special needs, inclusive education, iodine deficiency*

### INTRODUCTION

Boyolali reGENCY is located in Central Java, Indonesia. It stretches from west to east about 48 kms, and from north to south is about 54 kms. Most of the area is low-lying and undulating terrain with hills which are not so steep. However, in the western part of the region is a mountainous area, with the

peak of Mount Merapi (2911 m) and Mount Merbabu (3,141 m), both are active volcanoes. This area with an altitude of 700-3000 meters above sea level includes five districts, namely Ampel, Cepogo, Musuk, and Selo. Boyolali district has an area of approximately 101.510.0965 ha or approximately 4.5% of the area of Central

Java Province. (Data Boyolali Geography, 2011).

Boyolali has a population of 949,583 people in 2008 with the composition of men about 464,837 and women about 484,757. The population density is 935 people / km (BPS Boyolali, 2008). Geographical conditions of north and west Boyolali with this hilly area causes some areas on Boyolali to suffer from mild endemic goiter (Depkes, 1999). It is spread out in 89 villages in 16 Boyolali sub-districts. These areas are considered as areas of Iodine Deficiency Disorders (IDD) endemic.

Real impact of heavy Iodine Deficiency Disorders (IDD) is the occurrence of severe learning difficulties, resulting in lower school achievement and increasing percentage of children who are not able to have higher class and school dropouts. The research results of Bambang Hartono (in Abdul Salim, 2001) shows that 75% of 30% of elementary school-aged students who suffer from cretins experience difficulty learning in school. Another research by Abdul Salim (2002) in Boyolali acknowledges elementary age students who are indicated by cretins are about 11.89% and IDD is about 12.23%, thus they require to consume iodized salt formation as food salt / table salt. In addition, it is known that they need provision of rehabilitation services, remediation of learning and tutoring at elementary school age children, especially those who are cretins and IDD indicated.

In accordance with inclusive education movement in Indonesia, with the publication of the Minister of National Education No. 70 Year 2009 On Inclusive Education For Students with Disorder and High Potential of Intelligence and/or Special Talents, Article 3, paragraph (1) states that any student who have physical, emotional, mental, social, or has the potential intelligence and / or special talents are eligible for inclusive education in particular in the educational unit in relevance with the needs and abilities, therefore in Boyolali, there are many pioneered inclusive

schools, both elementary school and Junior High School.

In 2010, Boyolali Department of Education issued a decree about appointment number of schools as inclusive schools. More than 75 schools earned the Decree of the Head Office of Education as inclusive schools.

Inclusion is an ideological system which each and every citizen of the community school, principals, teachers, trustees, school administrators, learners, and parents recognize the shared responsibility together for educating all students so that they develop optimally according to their potential (Eman Gaad & Lavina Khan, 2007; Paul M. Ajuwon, 2008). Although the inclusive education requires the students with disabilities put in the regular classroom or school, the inclusive education is not just to put children with disabilities as much as possible within the normal learners (Richard Rose, 2007; Eman Gaad & Lavina Khan, 2007). Instead, inclusive education is a system that can only be applied when all the school community understand and adopt it. Inclusive education also concerns of how adults and classmates who normally welcome all learners in the classroom and recognize that the diversity of learners does not require single approach for all learners (Manisah Mohammad Ali, Mohd Ramlee Mustapha & Zalizan Clearly, 2006; Eman Gaad & Lavina Khan, 2007).

Children with special needs (CWSN) have obstacle in attending the classes. These obstacles are ranging from the heaviest to the lightest gradation (John Charema, 2010). As we know that disability is basically a condition of losing normality from function or anatomy structures, somebody's psychology and physiology. With disability, a person has limitations and different capabilities from a normal person so that it will affect the flexibility of physical activity, confidence and self-esteem, relationships with others and with the environment (Ajuwon, Paul M. 2008).

The difference of a person basically does not only lay in her age and physical condition, but also in her physical and psychological capabilities, interests and talents. For education world, this reality obliges the educators needed to consider these differences while planning, carrying it out, and assessing educational outcomes. Especially for learners with special needs (CWSN), there are differences in the characteristics and capabilities which appear prominently on almost all academic and non-academic (Abdul Salim, Munawir Jusuf, Sunardi, 2009). The implication of these differences is that there must be a special educative services which have to be suited according to each child's need. Sunardi, (2005) suggests some underlying needs for training services that are suited to individual needs. They are: (1) children with special needs in term of learning, is different from normal children, the more disability(ties) he has, the more complex the way of learning disability will be. Children with special needs more modifications and different time frame than normal learners. (2) Schools are responsible for providing functional skills so that students can be independent. Thus, schools are expected to teach functional skills which students need in running their lives at school, at home and in the community.

Publication consequence of Decree of Office of Education Authority in District of Boyolali about inclusive education needs to be addressed and followed by each school to recruit and to assess learners of CWSN and plan intervention programs for every type of CWSN in accordance to their characteristics and needs. The problem is that until now it has not been known yet about the number and type of CWSN who are present in every inclusive school Boyolali. In addition, it has not been known yet about how many prevalence for each school and for each class, how the characteristics and needs of children are, and so on. All of them still require assessment.

In general, this study aims to determine the prevalence of CWSN in inclusive elementary school in the area of iodine deficiency. The findings of this study are expected to be followed up in the form of intervention programs that enables teachers to help education in inclusive schools iodine deficiency area.

## METHODS

The research uses descriptive approach to describe the type and number of children with special needs in inclusive schools in the area of iodine deficiency. This research is conducted in 57 elementary schools of inclusive education. The requirements of schools to be place of research are: (a) The schools have to already have a Decree of the Head Office of Education as a school inclusive education, (b) There are children with special needs (CWSN) in the school, (c) The school have to have a special tutor (GPK).

Collected data includes: (a) the number of CWSN according to class, gender and classification/type of CWSN, (b). Inclusive school teacher profiles and the need to serve CWSN.

Methods of collecting data for the number and type/classification of CWSN is using screening method with CWSN screening instruments issued by the Directorate of Special Education and Special Services (PK-LK) in 2010. Meanwhile the data collection for teachers' profiles and teacher needed are collected by questionnaire method which is developed by researchers. The validity of the data collection instruments is using content validity by expert judgment.

Technical methods of data analysis are using percentage of quantitative descriptive analysis.

## RESULTS

### 1. Prevalence of Children with Special Needs

Based on the results of data analysis, it is known that 939 children are children with

special needs (CWSN). Most CWSN type is the type of slow-learning children (85.19%), followed by type of child learning difficulties (4.6%), mild mental retardation (3.51%), behavior disturbances (1.8%) and autism (1.5%), visual impairment (1.33%), quadriplegic (1.06%), speech defect (0.74%), hearing impairment (0.21%) and other types of CWSN.

Seeing from the distribution of CWSN on each inclusive elementary school, nine (9) schools (15.78%) has CWSN between 21 to 30 children, 41 schools (71.92%) has around 11-20 children, and seven (7) schools (12.28%) has 1-10 children.

Meanwhile, from class distribution, the highest number of CWSN in the second grade is 30.86%, followed by third grade which has 20.98%, fourth grade is 18.51%, first grade is 14.81%, fifth grade and six grade is(are) 12.34% and 2.46%, respectively. Moreover, acknowledging from gender of CWSN, around 447 (47.61%) children are boys and 492 (52.39%) children are girls.

## DISCUSSION

The results show that the majority of CWSN in inclusive school in this study area is slow-learning children. Numbers of CWSN with the real obstacle of the physical condition such as quadriplegic, blind, and deaf, are few. The results are consistent with the data about children with special needs in Central Java where the majority of these children in inclusive schools in Central Java is the type of slow-learning children with intelligence level between 70 to 89 (Tri Handoyo, 2011). However, these children are all in need of attention and special treatment according to their needs and abilities. The research's findings are consistent with another research result by Bambang Hartono and Abdul Salim (2002) that in endemic goiter area can be found children with cretins or children with special needs.

The presence of CWSN in inclusive schools demands school institutions to provide an appropriate educational program,

as described John Charema (2010) that inclusive schools accommodate all students in the same class. Schools provide a viable, challenging, yet in accordance to the abilities and needs of each children, as well as the help and support that can be given by teachers so that it brings success to children. Moreover, inclusive schools are also the place where every student is acceptable, becoming part of the class and helping one another with teachers, peers, and other community members so that his individual needs can be met. Sunardi (2005) states that inclusive education puts the CWSN with mild, moderate, and profound handicapping conditions in regular classrooms. This shows that the regular classroom is a relevant place of learning to CWSN regardless their type of disorder and gradation.

Skjorten (2000) states that inclusive education as a system of education service which requires: (1) there are children with special needs in public schools, (2) there is support from school community, (3) there is a flexible curriculum, (4) there is varied learning, (5) there are classroom teachers and special teachers, (6) there is modification of evaluation techniques, (7) there is no children who is not staying in the same grade.

The one who deserves more attention from school and Education Department, and also other institutions involved in CWSN services such as Special Education Program Teacher Training and Education Faculty and Research Center for Rehabilitation and Remediation of UNS' Research Institute, is that this research finds as many as nine (9) elementary schools (15.78%) has numbers of CWSN between 21-30 children and 41 schools (71.92%) has between 11-20 children. It is expected that these schools will be followed by a program of cretinism early detection and IDD. It means to all students in these schools need to (a) have urine test to determine whether they have iodine deficiency or not, (b) a IDD early detection through palpacy and cretin early detection, and IDD by using cretin identification

instruments for elementary school student which have been developed by the Center for Rehabilitation and Remediation (Abdul Salim, 1998) Research Institution of Sebelas Maret University.

In the respect of school teachers, it shows that most teachers are old (57,89%), and females (78,95%) dominate the male teachers. From the qualification, the level of Diploma in educational background is about 13,15% and bachelor degree is 86,84%. Moreover, those with employment status as civil servants are around 81,57% and temporary teachers are 18,42%. Regular teacher perceptions in identifying CWSN who consider that the children are doing well are around 31,57% and who feel that they are not yet doing well is 68,42%. Furthermore, the availability of identification tools in inclusive schools which have completed is around 5,26% and the rest (94,73%) is still lack of them.

Inclusive school teachers need training and technical assistance in the term of planning an inclusive school learning (97,36%), curriculum modification and learning assessment (94,73%), as well as compensatory skill guidance (97,36%). In addition, they also need inclusive school implementation guidance (71,05%), curriculum and learning operational and technical modifications (94,73%).

The findings of this research show that almost everything requires a follow-up, especially in the form of technical assistance and the guide books. This is understandable because the research subjects are school teachers with formal educational background, not from special education program (*Pendidikan Luar Biasa-PLB*) or school for special education teacher (*Sekolah Guru Pendidikan Luar Biasa-SGPLB*). That is why they are not prepared to have such competency to teach CWSN with their special needs and many obstacle graduation.

The interesting part about this research is that apparently it is found some teachers who think that they are already competent

enough to serve CWSN and they do not need for guidance books. After being traced, these teachers are class teachers who double themselves as a special tutors, that in fact they are graduated from Special Education Program of UNS.

Inclusive school teachers according to Decree of Minister No. 32/2008 on Standards of Academic Qualifications and Competencies for Special Education Teachers are including special education teachers. Therefore, they are required to master the professional competence (as well as pedagogical, social and personal competence), especially in the matter of "mastering the material, structure, concepts, and scientific mindset which support subject matters". Elaboration of his professional competency is the mastery of compensatory skills for CWSN based on the type of specialization. (Abdul Salim, 2011).

Above all, it can be said that in the future inclusive school teachers, it is crucial to gain education and training or technical assistance related to increased competence in providing educational services for CWSN as an effort to improve inclusive school teachers' professional competence.

## CONCLUSIONS AND RECOMMENDATIONS

### 1. Conclusion

In conclusion, this research can be formulated as follows:

- a. Most of CWSN are of slow-learning children, learning disability students, mild mental retardation, behavior disorder, autistic, physically disabled, visually impaired and deaf-mute.
- b. Most of the teachers are still facing difficulties in providing educational services for CWSN and most of teachers need inclusive educational guidebook, compensatory services and curriculum modification guidance, and learning and assessment outcomes of CWSN in inclusive schools.

### 2. Recommendations

Some recommendations of research findings are:

- a. All children with special needs in inclusive elementary schools need to obtain educational services according to their needs and abilities. Therefore, all teachers need to improve their ability to educate them in inclusive schools.
- b. It is needed to have parties who think and develop handbooks for inclusive schools such as for its implementation manuals, CWSN compensatory service guidance, curriculum modification guidance, learning and assessment of CWSN in inclusive schools.
- c. Schools need to cooperate with stakeholders in implementing inclusive education.

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