

Incidence of Speech Defects in Selected Secondary Schools of Oyo State, Nigeria

OYEBOLA, MOJI, Ph.D; ELEMUKAN I.O; Ph.D & AJAMU, E.O. Department of Special Education, University of Ibadan.

Abstract

The study investigated the incidence of speech defects in some randomly selected secondary schools in Oyo state. The importance of speech to man warranted the need to survey the incidence of speech defects among schools in Oyo state. 2522 students were sampled out of which about 607 (24.1%) students had various speech defects. Questionnaire is the major instrument, while personal interview were also used to assess the distribution of various speech defects in five selected schools in Oyo states. The findings revealed that Speech disorders are common in the schools selected, but in various degrees. Articulatory defects are more common in the schools, followed by delayed speech, voice disorder and hearing loss, stuttering has the least occurrence. More males are affected than females in ratio 52 to 47. On the whole 24.1% of the population used have speech defects. However, the incidence of speech defects in schools warranted the need to have speech therapists in schools, as well as proper classification and accurate diagnosis, for appropriate remediation to be put in place in schools. The study recommended that there is a need for early identification and treatments for all public schools pupils in the state. Adequate preparation of personnels for the school services should be ensured, through training and re-training of the professional and teachers in schools.

Introduction

Speech is the behaviour of forming and sequencing the sounds of Oral language. It is the most common symbol used in communication between humans. Speech refers to faculty of expressing thoughts in words, enunciation, remarks, conversation, language, formal address and oration. Speech may be studied from many points of view. It may be analysed from a physical base, relating the body in vibrating, and resounding systems to the frequency, intensity and duration of sounds.

Viewing speech psychologically it is concerned with personality, self-expression, and such processes as motivation, attention, perception, recognition and memory. Physiologically, the emphasis is on interaction of muscles, cartilage and

bone or neurological activity, such as excitation, transmission, integration and response of the body's nervous system, (Calvert and Silverman, 1975). Speech is the use of systematized vocalization to express verbal symbols or words. Calvert and Silverman stressed that man is an organized, functional unity, of which speech is only a part, and that speech becomes a part of his physical and social environment, with only speech serving as a vital binding force. Oyebola, Isaiah and Okuoyibo (2000), attested to the fact that speech is very basic and essential for world's socialization processes, and that with speech communication, man cooperates with his fellow men. However, speech is considered to be defective when the manner of speaking interferes with communication, when the person's manner of speaking distracts attention

from what it is said, or when speech is such that, the speaker himself is unduly self-conscious or apprehensive about his way of speaking. Ita (1995) observed that speech disorder is therefore a condition that makes communication fails to produce a desired effect or result.

Osowole and Ijaduola, (1996) described speech defects as one of the major problems that are most common with the head and neck cancer patient. It can be appreciated therefore that in some cases a disorder of speech implies that the formulation of meaning were not affected but the transformation of messages through the medium of sound is in some way impaired. Concern for the speech defect undoubtedly preceded by different activities that led to the development of an interest in normal speech.

Speech defects refer to the difficulties in the acquisitions of vocal speech skills. A speech is delayed if it fails to appear or is late in appearance, and also if there is deviation in the sounds, syllables and word patterns, so marketed as to disturb intelligibility, and more so, if the vocabulary and language patterns belong to the norms of one of the chronological age or sex.

Olukoju (1981) stated that 6.66% of the children of the 4, 217 pupils were found to be defective in speech. She further observed that speech defects occur more in males than females and this statement is true for all age group for most defects of speech. Oyebola (1997) observed that a very high incidence of defective speech was found in the mentally retarded and that the percentage of speech defects increases as the intelligence quotient decrease. This shows that the intelligent quotient of an individual has effect on the person's speech.

Articulation speech defect rank highest among all the categories of speech defects. Bakare (1976) observed that articulation problems constitute 65% of the case load of practicing speech pathologies. Ysseldyke and Algo-zzine (1990) defined articulation disorder as the abnormal

production of sounds. They further identified three kinds of speech disorders as:

- a) Disorder of articulation.
- b) Voice disorders.
- c) Fluency disorders

METHODOLOGY

Five research questions were generated for the study.

1. Many schools will have unidentified speech defects.
2. Articulation defects is not common in schools.
3. Many schools were without adequate treatment and classification of the students.
4. Females have more incidence of speech defects than males.
5. Enough experts/professional are absent in schools?

Population Studied

The population of the study were 2,562 students among which 607 subjects were finally chosen through screening to contained speech defects. It consists of males and females secondary schools students in the selected schools in Ibadan.

Sample/Sampling technique

Five schools were randomly selected for the study out of about five hundred primary schools in Ibadan, males and females students were screened randomly among the 2,562 subjects, out of which 24% of the students were discovered to have speech defects, amounting to 607 pupils in the five schools chosen, consisting of 314 males and 293 females in all. They are pupils, in primary 4 to 6 with mean age of 11.5years.

Instrument:

The instrument used was questionnaire tagged 'ISDSSS' (Incidence of Speech Defects in Selected Secondary Schools), which were given out to the teachers and students of the schools selected to complete, with the assistance of the researchers, personal interview was also conducted among the respondents.

In addition, the researchers screened the students with speech defect, while the screening

test was prepared in the form of oral classroom test. The screening lasted for only a short period per class. This was used to elicit sample of different speech defects. The sound tested were, p, b, z, s, x, g, k, q, t, m, n, i, e, d, u, v.

Moreover, each student was asked to fill in questionnaire which consists of personal data, like name, age, parents, occupation, hearing loss, academic performance, type and cause of speech defect, and to indicate other noticeable non-fluencies.

The questionnaire was divided into two sections, A and B respectively. Section A deals with the name, sex, age and parent's occupation. While section B has the details of the problem. Personal interview were conducted for all the respondents to clarify issues in the questionnaire. The response format was done in such a manner that respondents ticked Yes or No. The 'Yes' indicates the teacher's agreement while 'No' indicates the disagreement. The Yes response carry a one mark and No carry zero scores. The test-retest of the self made questionnaire in a neutral school indicated 0.79 using crumbach formular.

Data Analysis

The descriptive statistics of percentages and mean scores were used.

RESULTS

As shown in the appendix on page 9 and 10

Table I: This table states the statistical population of students used for the study, totaling 2,522.

Table II: The table deals with the incidence of articulatory defects among the students studied in the five selected secondary schools. The findings showed that 17.34% of the students have articulatory defect.

Table III : Reveals the incidence of delayed speech in the selected schools. It was found that 2.2% of the populations have delayed speech.

Table IV : Shows the incidence of voice

disorder among the schools and that 1.84% of the population have voice disorder.

Table V : This table shows that only 0.9% of all the population has stuttering.

Table VI : Showed that 2.0% of the sample have speech defect as a result of hearing loss.

Table VII : It revealed the incidence of speech defects in schools. In school 3 the highest cases of speech defect was pronounced 26.02%, while school 1 and school 5 followed sequentially, with 21.99% and 19.44% respectively. Schools 2 and 4 have the least incident of speech defects with 15.98% and 17.95% respectively.

Table VIII : The table shows the comparison of incidence of speech defect of males and females in the five selected schools. The incidence is higher among the males than females with approximately 52.7% as against 47.3% of females respectively.

Discussion

This study showed that the incidence of speech defects is prevalence at school 3 followed by schools 1, 5 and 4. However, while in school 2 the lowest percentage of incidence of speech disorders were noticeable. The total number of students with various speech defects in the selected schools are as follows, when compared to the population sampled:

Articulatory defect is 17.4% (438 student), Stuttering is 0.90% (23 students),

Voice disorder is 1.8% (46 students), Delayed speech is 2.2% (55 students).

Speech defect with hearing loss is 1.8% (45 students) respectively.

Through oral interview, test and observation carried out in the schools, it was discovered that articulation defect was more pronounced among the students than any of the other speech defect. This is due to the transfer of the local accent in their mother tongue to their spoken English. Articulation problems encountered include substitution addition, omission and distortion of

speech sounds. All these were found in their pronunciation of words like 'rice' as rithes. A little of delayed speech was also observed among students who found it difficult expressing themselves. These types of students used gestures before they can express themselves. It was found that these students developed speech defects as a result of their home influence, organic influence, psychological influence and cultural influence. As a result of these speech defects, students affected seem to have emotional problem, which then result in their not wanting to ask question in class for fear of other students laughing at them or teacher embarrassing them before their mates. Some of them resulted to being aggressive and hostile, which is a common phenomenon among stutterers and students with hearing impairment. From this study, it was discover that incidence of speech defect is more common in males than in females. This finding corroborated Okuoyinbo (1980) who reported that 4.75% boys to 1% girls had speech defect.

Conclusion:

The knowledge of incidence of speech defect is of importance to both the clinicians and teachers. Determination of speech defect is not a simple matter To make the findings successful, speech defect must be classified. From classification it would be possible to carry out the survey of incidence and treatments by professionals.

From this study, it could be deduced that most public schools have incidence of speech defects, therefore the speech therapist would be expected to examine, diagnose and evaluate the speech, voice and language behaviour of children and adults, who have cases of speech problem. Speech training should be included in the regular curriculum of all teacher training institutions while the Government should organize courses and seminars on speech corrections in schools and for parents.

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Appendix
RESULTS

Table I

Statistical Population of Students used.

Schools	Female	Male	Total
School one	225	300	525
School two	206	310	516
School three	290	200	490
School four	196	368	564
School five	207	220	427
Grand Total	1,124	1,398	2,522

Table II

Subject with Distribution of Articulatory Disorder

Schools	Numbers of students	Percentages
School 1	98	22.4
School 2	64	14.6
School 3	75	17.1
School 4	92	21.0
School 5	109	24.9
Total	438	100%

Table III

Subject with Distribution of Delayed Speech

Schools	Number of students	Percentage
School 1	15	27.3
School 2	11	20.0
School 3	13	23.6
School 4	10	18.2
School 5	6	10.9
Total	55	100%

Table IV

Subject with Distribution of Voice Disorder

Schools	Number of students	Percentage
School 1	-	-
School 2	10	21.7
School 3	7	15.2
School 4	18	39.1
School 5	11	23.9
Total	46	100%

Table V
Subject with Distribution of Stuttering

Schools	Number of students	Percentage
School 1	2	8.6
School 2	11	47.8
School 3	7	30.4
School 4	-	0
School 5	3	13.0
Total	43	100%

Table VI
Subject with Distribution of Speech Defect With Hearing Loss

Schools	Number of students	Percentage
School 1	-	-
School 2	-	-
Schools 3	45	7.4
School 4	-	-
School 5	-	-
Total	45	

Table VII
Correlation of Incidences Occurrence of Speech Defects Among The Schools Studied.

Schools	Speech Defects					Number of students	Percentage
	Articulatory disorder	Stuttering	Voice disorder	Delayed speech	Hearing loss		
School 1	98	2	18	15	-	133	21.9
School 2	64	11	11	11	-	97	15.98
School 3	75	7	10	13	45	158	26.02
School 4	92	-	7	10	-	109	17.95
School 5	109	3	-	6	-	118	19.44
Total	438	23	46	55	45	607	100%
Population %	17.4	0.9	1.84	2.15	1.8	24.1	-

Table VIII
Comparison of Speech Defects in Female and Male Disorder.

Sex	Articulatory Disorder	Stutterers	Voice Disorder	Hearing loss	Delayed Speech	Number of Pupils	Percentage
Female	209	11	22	15	25	282	47.3
Male	217	13	24	30	30	314	52.7
Total	426	24	46	45	55	596	100%