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An Analysis of Student Health Examinations in the Page Public Schools From 1956 to 1963

Gale E. Moug

AN ANALYSIS OF STUDENT HEALTH EXAMINATIONS IN THE PAGE PUBLIC SCHOOLS FROM 1956 TO 1963

by

Gale E. Houg
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This abstract of a thesis submitted by Gale E. Houg in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota, is hereby approved by the Committee under whom the work has been done.

W.C. Koenig
Chairman

John L. Luaday

James Ryvdale

Christopher J. Hamre
Dean of the Graduate School

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Gale E. Moug, M. S.

The thesis here abstracted was written under the direction of Walter C. Koenig and approved by Dr. John L. Quaday and Dr. James Rybak as members of the examining committee, of which Mr. Koenig was chairman.

The purpose of this study was to determine in which area the greatest number of physical defects were found over an eight-year period.

Health examinations were given by the county health nurse every year to alternate grades in the Page Public School System. Health defects were grouped into seven classifications, as follows: (1) ocular defects, (2) dental defects, (3) skin and posture defects, (4) throat defects, (5) cardiac defects, (6) ear and wax defects, and (7) miscellaneous defects, which included such areas as speech problems, obesity, psychological, fingernail biting, positive reaction to tuberculin test, retracted testicle, hernia, oral hygiene, nutrition, thyroid condition, and surgery.

Lists were then made of the number of defects, the average number of students examined, and the per cent of defective students. Percentages of total defects were computed.

The last phase of this study was concerned with the per cent of increase or decrease of these defects from one year to the next.

The conclusions of this study were as follows:

(1) Skin and posture defects constituted the most prevalent area of defects over the eight-year period, followed by dental and ocular defects in that order.

(2) Miscellaneous defects ranked fourth in total number of deficiencies.

(3) Throat, ear and wax, and cardiac defects made up the least prevalent area of deficiencies over the eight-year period.

(4) There were percentage decreases in all of the defects over the eight-year period except those of the throat.

This thesis submitted by Gale E. Haug in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota, is hereby approved by the Committee under whom the work has been done.

W. C. Koenig
Chairman

John L. Lindsay

James Roy Cole

Christopher J. Hamre
Dean of the Graduate School

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G. E. H.

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CHAPTER I

INTRODUCTION

It is generally recognized that the school health program is an essential unit of the total education program, but it is quite surprising how little is being done in this area. According to leaders in the field, there are changes in the health problems of school age children, and consequently, school health procedures need to be adapted to these changing conditions.

Frequently the question is raised, "Why do we need school health examinations?" Parents very justly question the need for such examinations when already their children are under the supervision of a private practitioner and have been examined for swimming or the Boy Scouts or for admission to camp.

Schools answer that they are interested because they must know whether the child is in proper physical condition from one year to the next to obtain the most from his school experiences. The school must know whether or not the pupils can participate in the whole school program or just part of it, or whether the program must be especially modified for the individual child. Furthermore, there is a close relationship between physical health of the child and his ability to learn.[1]

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[1] Cyrus H. Maxwell, "School Health Examinations," Journal of School Health, XIX (May 1950), pp. 140-145.

If the child must repeat a grade because of some physical condition which is remedial or can be compensated for, there has been a waste of the taxpayers' money as well as the time of the teacher and pupil.

Statement of the Problem

The problem with which the writer is concerned is in the area of health check-ups made by the county health nurse to determine certain physical defects, if any, in the school children. More specifically, the writer hoped to (1) determine in which areas the greatest number of defects were to be found, (2) lastly, to try to discover if these defects were taken care of after they have been discovered.

This study will be particularly interested in the more common defects of school children, such as lack of dental care, defective hearing and vision, poor posture, and malnutrition.

Method of Study

As mentioned previously the county health nurse makes health check-ups on the students once every year, but to alternate grades. Reports are then sent to the school, citing individual defects, if any. These health reports are on file in the Page School, where they have been made accessible to the writer.

The Inventory Method has been used for treating the data.

The results of the study were first enumerated, then tabulated and the percentages then found. Also, percentages of increase or decrease were determined.

The results were then analyzed and conclusions were then drawn.

Purpose of the Study

The purpose of this study was to determine where the greatest number of physical defects lay over an eight-year period in students enrolled in a Class B school system in the State of North Dakota. This study is also designed to determine the percentage of increase or decrease in these defects from one year to the next.

It was hoped that this study might bring to mind the importance of health check-ups and give educators a better insight in regard to the needs of these students.

Delimitations and Limitation

This study will be delimited to the students of this Class B school system who have undergone physical examinations as made by the county health nurse over the eight-year period, 1956-1963.

Health check-ups are given every year but to alternate grades only. Therefore, it was hoped that a good cross section could be obtained for this study.

This study is limited to the fact that these health examinations are not give at the same time each year. One year they might be given in October and the next year in January.

CHAPTER II

REVIEW OF RELATED LITERATURE

In reviewing related literature it was noted that there appeared to be some evidence that there should be more concern for health education and the correction of health defects.

Helen Starr, in her article, "Today's Pupil--Health Informed or Health Educated," stated that today's pupils should be health educated and not just health informed.[2]

In 1950, Marie Swanson, R. N., made a study of "Reasons for Lack of Treatment of Defects of High School Pupils."[3] In this study the author pointed out that some individual schools have successfully required treatment for health defects as a prerequisite for graduation just as some schools required corrective measures for alleviating defects before entering into school and such activities as music, physical education, and athletics. However, she knew of no state that had a law requiring treatment before pupils graduate or left school for other reasons.

Swanson sent blanks and directions for a study of twenty pupils to the principals of the high schools in New York State whose health

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[2]Helen M. Starr, "Today's Pupil--Health Informed or Health Educated?" Journal of American Health, Physical Education and Recreation, XV (September 1954), p. 18.

[3]Marie Swanson, "Reasons for Lack of Treatment of Physical Defects of High School Students," The Journal of School Health, XIX (September 1950), pp. 172-79.

service was under the supervision of the Health Service Bureau of the New York State Education Department.

Sixty-one per cent of the principals (470) to whom the blanks were sent returned them. Seventy per cent of the city high schools participated, seventy-five per cent of those in villages, fifty-one per cent in union-free schools, and sixty-six per cent in central rural schools.

On receipt of the blanks, individual cards were punched for each pupil with untreated defects, his age and grade, and the number of years the defect had been reported to his parents for treatment.

The size of the school and community were indicated, together with the efforts the school might have made to secure treatment such as conferences with parents and with cooperating agencies. Finally, the reason for lack of treatment was given as accurately as the school could determine.

Of the untreated defects, about one-half were of the teeth, one-fourth of tonsils, and one-eighth of eyes. The remaining one-eighth were made up of twelve different defects: orthopedic, ears and ear, nutrition, heart, thyroid, skin, hernia, nose, glands, reproduction organs, speech and nervous system.

The untreated defects of the longest standing were those of nutrition, especially that of obesity.

The reasons for lack of treatment were coded under twenty-eight headings, but most of the reasons were grouped under three main headings. First were reasons having to do with the parents' attitude toward the child, the defect and need for treatment, 45.1 per cent.

Second, reasons concerned with lack of money, 31.7 per cent, and third, the pupils' objection to treatment, 14.1 per cent.

From this study, the author concluded that the school has certain possible contributions to make: (1) the home economics teacher can help with family budgeting, (2) the school can help with community agencies for loans, etc., (3) schools should provide an opportunity for sufficient health knowledge experiences to pupils so they know the desirability of treatment, (4) the school needs to seek the cooperation of adult education groups to instruct the parents in health standards and to change their attitudes toward health problems. The author felt that team work was of immeasurable value because the best physician cannot do the job alone.

Helen Starr, in her study, stated that there was a big difference between merely telling the students about health and letting them practice actual health in life-like situations.[4]

The way the health teaching was carried on in the school determined whether the end-product was a health-educated pupil or merely one who had some health information. The participation of all teachers, parents, community health workers, school physicians, and dentists in giving pupils an opportunity to practice their desirable health behavior through experiences was a big factor in the success of the program.[5]

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[4]Starr, loc. cit.

[5]Ibid.

Tipton and Loop, in 1952, conducted a health survey of Hunter College Freshmen, investigating personal appearance and body grooming.[6] This study indicated the major fields of weakness to be ocular hygiene, dental care, and foot hygiene.

This study also showed that more time should be allotted to health courses and the emphasis should be placed on real life situations in order to have a more practical approach and as a motivational force for health instruction.

Harry Finger, who, in 1955, made a study entitled "Observation on School Programs," felt that until communities became sufficiently aware of the need for hiring trained health educators, the teaching of health education in the schools of this country was destined to lag sadly behind the necessity.[7]

The above conclusion was based on the results of the six-month survey of the status of health education in the United States. The survey served a dual purpose, namely: (1) to investigate the teaching of health education in the high schools of the country; and (2) to inquire concerning the various college and university programs training prospective personnel in the field of health education.

Among the interesting facts revealed in this study, two seem to deserve emphasis: (1) Where there is a division between city and country school systems, the quality of health teaching is very often superior in the country schools; and (2) In general, elementary school teachers would seem to be better prepared and tend to show a

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[7]Harry Finger, "Observations on School Health Programs," The Journal of the American Association for Health, Physical Education and Recreation, XXVI (May-June 1955), p. 28.

greater interest in teaching health facts to their students than do secondary school personnel.[8] Partial explanation for the former is the closer relationship of the country schools to the county health department and a greater willingness to co-operate on every level. For the latter, the greater number of elementary teachers tend to be more willing and eager to attend in-service teaching programs and seminars sponsored by community health agencies.

Hindricks in her study of a college proficiency test in hygiene, concluded that there was evidence that more rigorous programs of teaching were needed at all levels of training if young adults are to be equipped with information on the basis of which they could develop attitudes and habits concerning healthful personal and community living, which might help protect them and their families, and enable them to enjoy life to its fullest capacity.[9]

In this particular study it was found that only one student in every three had the sufficient knowledge or background to pass a test of health knowledge with a score of 75 per cent. Therefore, Hindricks recommended that studies should be made to discover where the lack of preparation at lower grade levels or high school levels should be supplemented and where greater emphasis should be placed in college health teaching.[10]

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[8] Ibid.

[9] Marie A. Hindricks, "Some Notes on a College Proficiency Test in Hygiene," Research Quarterly, XXIV (March 1953), pp. 18-29.

[10] Ibid., pp. 20-21.

CHAPTER III

METHOD OF PROCEDURE

This writer has used the inventory method for compiling the data. Health defects were grouped into seven classifications, as follows: (1) ocular defects, (2) dental defects, (3) skin and posture defects, (4) throat defects, (5) cardiac defects, (6) ear and wax defects, and (7) miscellaneous defects, which included such defects as speech problems, obesity, psychological, fingernail biting, positive reactor to tuberculin test, retracted testicle, hernia, oral hygiene, nutrition, thyroid condition and surgery.

Lists were then made of the number of defects, the average number of students examined, the per cent of defective students. Percentages of total defects were computed.

The writer, besides listing the defects for each year, also compiled the total number of defects, total number of students examined, the percentages of all defective students, and the per cent of total defects for the entire eight-year period.

The last phase of this study was concerned with the per cent of increase or decrease of these defects from one year to the next. Also, a comparison was made between conditions which existed from the first year, 1955, to the last year, 1963, to give a clearer picture of the increase or decrease of the defects over the entire eight-year period.

CHAPTER IV

ANALESIS OF DATA

The physical defects of students as were discovered during the health examinations in 1956, are illustrated in Table I.

Table I

Physical Defects for 1956

Defect	No. of Defects	Average No. of Student Examinations	Per cent of Defective Students	Per cent of Total Defects
Ocular	22	120	18.3%	16.3%
Dental	27	120	22.5%	20.0%
Skin and Posture	24	120	20.0%	17.8%
Throat	10	120	.83%	7.4%
Cardiac	5	120	4.1%	3.7%
Ears and Ear	16	120	13.3%	11.8%
Misc: positive reaction to tuberculin test, nutrition, hernia, retracted testicle, diabetic, allergies, psychological, finger-nail biting	31	120	25.8%	22.9%

The foregoing table shows that miscellaneous defects were the most prevalent in 1956, with 25.8 per cent of the entire student body

being afflicted. Miscellaneous defects constituted 22.9 per cent of the total defects.

Dental defects ranked highest among the single deficiencies, with 22.5 per cent of the students having dental problems. Dental defects were 20 per cent of the total defects.

The physical defects of students, discovered during health examinations in 1957 are illustrated in Table II.

Table II

Physical Defects for 1957

Defect	No. of Defects	Average No. of Student Examinations	Per cent of Defective Students	Per cent of Total Defects
Ocular	25	120	20.8%	36.2%
Dental	18	120	15.0%	26.1%
Skin and Posture	8	120	6.1%	11.6%
Throat	5	120	4.1%	7.2%
Cardiac	4	120	3.3%	5.8%
Ears and Wax	3	120	2.5%	4.3%
Miss: undescended testicle, thyroid condition, speech therapy, and psychological test	6	120	5.0%	8.7%

Table II shows ocular deficiencies replacing miscellaneous defects as the number one defect in 1957, with twenty-five cases, or 20.8 per cent of the student body having some sort of ocular trouble.

Dental defects ranked second, with eighteen cases. Fifteen per cent of the student body was affected. Dental defects constituted 26.1 per cent of the total deficiencies.

Skin and posture defects accounted for 11.6 per cent of the single deficiencies.

The physical defects of students as were discovered during health examinations in 1958 are illustrated in Table III.

Table III

Physical Defects for 1958

Defect	No. of Defects	Average No. of Students Examinations	Per cent of Defective Students	Per cent of Total Defects
Ocular	27	120	22.5%	22.1%
Dental	29	120	24.2%	23.8%
Skin and Posture	30	120	25.0%	24.6%
Throat	11	120	8.2%	9.0%
Cardiac	3	120	2.5%	2.5%
Ears and Ear	2	120	1.7%	1.6%
Misc: speech defects, fingernail biting, nutrition, psychological	20	120	16.1%	16.4%

Table III shows skin and posture defects the most numerous in 1958. Thirty students, or 25 per cent of the student body was afflicted.

Dental defects ranked second with twenty-nine cases, or 24.2% of the student body having dental deficiencies. This constituted 23.8 per cent of the total physical afflictions.

The physical defects of students, as discovered during health examinations in 1959, are illustrated in Table IV.

Table IV

Physical Defects for 1959

Defect	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Ocular	17	120	14.2%	12.9%
Dental	39	120	32.5%	29.7%
Skin and Posture	36	120	30.8%	28.2%
Throat	11	120	9.2%	8.3%
Cardiac	1	120	.83%	.76%
Ears and Ear	10	120	8.3%	7.6%
Misc: fingernail biting, positive reaction to tuberculin test, speech condition, obesity	16	120	13.3%	12.2%

Table IV again shows skin and posture being the number one area of deficiencies with thirty-nine cases, or 32.5 per cent of the student body being afflicted.

Dental problems with thirty-six cases followed skin and posture deficiencies. Thirty and eight tenths per cent of the student body had some form of dental defect.

The physical defects of students shown in Table V below were discovered during health examinations in 1960.

Table V

Physical Defects for 1960

Defect	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Ocular	17	120	14.2%	12.7%
Dental	33	120	25.0%	24.6%
Skin and Posture	45	120	37.5%	33.6%
Throat	15	120	12.5%	11.2%
Cardiac	0	120	———	———
Ears and Nose	10	120	.83%	7.5%
Misc: oral hygiene, fingernail biting, obesity, psychological	14	120	11.6%	10.4%

As shown in Table V, skin and posture deficiencies maintained the lead as the number one defect in 1960. There were forty-five cases or 37.5% of the students having this problem. Skin and posture defects accounted for 33.6% of the total deficiencies.

The second highest area of deficiency in 1960 was dental. There were thirty-three cases, or 25 per cent of the students having some sort of dental deficiency. This accounted for 24.6 per cent of the total defects.

The health examination program in 1961 revealed defects as those illustrated in Table VI below.

Table VI

Physical Defects for 1961

Defect	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Ocular	5	120	4.2%	6.0%
Dental	21	120	17.5%	25.3%
Skin and Posture	33	120	27.5%	39.8%
Throat	8	120	6.7%	9.6%
Cardiac	0	120	———	———
Ears and Ear	3	120	2.5%	3.6%
Misc: speech defects, psychological, oral hygiene, fingernail biting	13	120	10.8%	15.7%

For the fourth year in a row skin and posture imperfections ranked as the number one deficiency, with thirty-three cases. Twenty-seven and five tenths per cent of the student body are shown to have this defect. This deficiency constitutes 39.8 per cent of the total defects.

Dental deficiencies ranked second among the single physical defects with 17.5 per cent of the students having this problem. Dental faults accounted for 25.3 per cent of the total defects.

The physical defects of students as were discovered during health examinations in 1962, are illustrated in Table VII.

Table VII

Physical Defects for 1962

Defect	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Ocular	14	120	11.7%	14.3%
Dental	10	120	8.3%	10.2%
Skin and Posture	30	120	25.0%	30.6%
Throat	26	120	20.8%	26.5%
Cardiac	0	120	———	———
Ears and Ear	5	120	4.2%	5.1%
Misc: surgery, psychological, nutrition, obesity, fingernail biting	13	120	10.8%	13.3%

In 1962 Table VII shows that skin and posture imperfections were once again the number one menace with thirty cases, or 25 per cent of the students being afflicted. This constituted 30.6 per cent of the total defects.

Throat deficiencies ranked second in the single number of defects with twenty-six cases. Twenty and eight tenths per cent of the entire school had this particular problem. Throat problems comprised 26.5 per cent of the total defects.

Throat deficiencies replaced skin and posture defects in 1963, as shown by Table VIII.

Table VIII

Physical Defects for 1963

Defect	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Ocular	16	120	13.3%	15.1%
Dental	11	120	9.1%	10.4%
Skin and Posture	20	120	16.7%	18.9%
Throat	23	120	19.2%	21.7%
Cardiac	0	120	———	———
Ears and Wax	13	120	10.8%	12.3%
Misc: nutrition, psychological, obesity, oral hygiene, speech defects, fingernail biting	23	120	19.2%	21.7%

In 1963 there were twenty-three cases of throat deficiencies making it the most prevalent. Nineteen and two tenths per cent of the student body had this problem. Throat defects accounted for 21.7 per cent of the total imperfections.

Skin and posture abnormalities dropped to second as the highest single deficiency with twenty cases. Sixteen and seven tenths per cent of the student body were afflicted. Skin and posture problems constituted 18.9 per cent of the total defects.

Table IX

The Areas Where the Greatest Number of

Defects Were Found Between 1956-1963

Defect Area	No. of Defects	Average No. of Student Examinations	Per Cent of Defective Students	Per Cent of Total Defects
Skin and Posture	226	960	23.5%	24.9%
Dental	188	960	19.5%	21.6%
Ocular	143	960	14.8%	16.5%
Misc: obesity, psychological, retracted testicle, fingernail biting, positive reaction to tuberculin test, nutrition, thyroid condition, diabetic condition, allergies, speech defect, oral hygiene, hernia	136	960	14.2%	15.7%
Throat	99	960	10.3%	11.5%
Ears and Wax	62	960	6.5%	7.2%
Cardiac	13	960	1.4%	1.5%

Table IX shows skin and posture deficiencies as the most prevalent over the entire eight-year-period with two hundred and twenty-six cases. Twenty-three and five tenths per cent of the entire student body had thisproblem. Skin and posture defects accounted for 24.9 per cent of the total imperfections.

Skin and posture defects were followed by dental, ocular, misc., throat, ears and wax, and cardiac deficiencies.

Table X

Per Cent of Increase or Decrease

of Physical Defects Between 1956-1957

	Increase	Decrease
Ocular	13.6%	
Dental		33.3%
Skin and Posture		69.5%
Throat		50.6%
Cardiac		19.5%
Ears and Wax		81.2%
Misc: undescended testicle, thyroid condition, speech defects, psychological, positive reaction to tuberculin test, nutrition, hernia, diabetic condition, allergies, fingernail biting		

Table X reveals percentage of decreases for all defects between 1956-57 except ocular deficiencies. There was a 13.6 per cent increase in that area.

Table XI

Per Cent of Increase or Decrease

of Physical Defects Between 1957-1958

	Increase	Decrease
Ocular	8.2%	
Dental	61.3%	
Skin and Posture	30.4%	
Throat	100.0%	
Cardiac		24.2%
Ears and Wax		32.0%
Misc: speech defects, fingernail biting, nutrition, psychological	222.0%	

Table XI reveals that all defects except those of ears and wax and the cardiac area had a percentage of increase between 1957 and 1958.

Throat deficiencies with a 100 per cent increase and miscellaneous defects with 222 per cent increase stand out in this table. The reasons for the large increase in throat defects is probably due to the fact that the examinations varied as for the time of the year they were given.

Miscellaneous defects probably increased because of the diligence with which these examinations were given.

Table XII

Per Cent of Increase or Decrease

of Physical Defects Between 1958-1959

	Increase	Decrease
Ocular		36.8%
Dental	34.5%	
Skin and Posture	23.2%	
Throat	12.2%	
Cardiac		66.8%
Ears and Wax	388.3%	
Misc: fingernail biting, positive reaction to tuberculin test, speech condition, obesity		

Table XII reveals percentage decrease for ocular, cardiac and miscellaneous defects. Increased percentages were found in dental, skin and posture, throat, and ears and wax.

The large percentage of increase for ear and wax defects, 388.3 per cent, might indicate an audiometer test was used rather than a sight examination of the ears.

Table XIII

Per Cent of Increase or Decrease

of Physical Defects Between 1959-1960

	Increase	Decrease
Ocular	———	———
Dental		23.1%
Skin and Posture	21.0%	
Throat	35.9%	
Cardiac		100.0%
Ears and Wax	———	———
Misc: speech defect, fingernail biting, obesity, psychological, oral hygiene		45.1%

Table XIII shows that ocular and ear and wax defects did not have either an increase or decrease in percentages.

Cardiac deficiencies showed a 100 per cent decrease during this year. This is probably due to the fact that the students who had a cardiac deficiency either moved away or were graduated from school.

Table XIV

Per Cent of Increase or Decrease

of Physical Defects Between 1960-1961

	Increase	Decrease
Ocular		70.4%
Dental		30.0%
Skin and Posture		26.7%
Throat		46.4%
Cardiac	----	----
Ears and Nose		69.2%
Misc: oral hygiene, fingernail biting, obesity, psychological		

In 1960-61 a percentage decrease for all defects except miscellaneous is shown in Table XIV.

Table XV

Per Cent of Increase or Decrease
of Physical Defects Between 1961-1962

	Increase	Decrease
Ocular	175.8%	
Dental		56.2%
Skin and Posture		6.1%
Throat	210.4%	
Cardiac	———	———
Hare and Wax	———	———
Miss: surgery, psychological, obesity, fingernail biting		

The comparison of percentage increase or decrease for 1961-62 reveals that dental and skin and posture defects decreased.

There was a large percentage increase for ocular and throat deficiencies.

The large percentage increase for ocular defects might be due to more awareness on the teachers' part and a more thorough examination by the nurse.

The time of the year of health examination might account for the large percentage increase of throat defects.

Table XVI

Per Cent of Increase or Decrease

of Physical Defects Between 1962-1963

	Increase	Decrease
Ocular	13.7%	
Dental	9.1%	
Skin and Posture		33.2%
Throat		7.7%
Cardiac	----	----
Ears and Wax	157.1%	
Misc: nutrition, psychological, obesity, oral hygiene, speech defects, fingernail biting		

The above table reveals a per cent of increase for ocular, dental, and ears and wax defects. Percentages of decrease are shown for skin and posture and throat deficiencies.

Ears and wax defects show a very large percentage of increase. This was probably due to the fact that an audiometer was used in addition to sight inspection.

Table XVII

Per Cent of Increase or Decrease
of Physical Defects Over the Entire Eight-Year Period
(1956-1963)

	Increase	Decrease
Ocular		27.3%
Dental		59.6%
Skin and Posture		16.5%
Throat	221.3%	
Cardiac		100.0%
Ears and Ear		18.8%
Miscellaneous		25.6%

Table XVII discloses a percentage decrease for all physical defects, except throat deficiencies, over the eight-year period. This seems to indicate that, because of the different times during the years in which the examinations were given.

Throat defects might fluctuate considerably, depending on whether or not health examinations were taken during the winter months.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to determine in which area the greatest number of physical defects were found over an eight-year period.

Health examinations were given by the county health nurse every year to alternate grades in the Page Public School System. Health defects were grouped into seven classifications, as follows: (1) ocular defects, (2) dental defects, (3) skin and posture defects, (4) throat defects, (5) cardiac defects, (6) ear and ear defects, (7) miscellaneous defects, which included such areas as speech problems, obesity, psychological, fingernail biting, positive reaction to tuberculin test, retracted testicle, hernia, oral hygiene, nutrition, thyroid condition, and surgery.

Lists were then made of the number of defects, the average number of students examined, and the per cent of defective students. Percentages of total defects were computed.

The last phase of this study was concerned with the per cent of increase or decrease of these defects from one year to the next.

Conclusions

The following conclusions seem warranted on the basis of the data compiled in this study.

Skin and posture defects constitute the most prevalent area of defects over the eight-year period, followed by dental and then ocular defects in that order.

Miscellaneous defects, which included obesity, psychological disturbances, retracted testicle, fingernail biting, positive reaction to tuberculin test, nutrition, thyroid condition, diabetic condition, allergies, speech, oral hygiene, and hernia, ranked fourth in total number of defects.

Throat, ears and wax, and cardiac defects made up the least prevalent area of deficiencies over the eight-year period.

There were decreases in all of the defects over the eight-year period except those of the throat. This is a strong indication that if health reports are utilized in an intelligent manner the majority of defects reported can be corrected. This would not only aid the students, but also the school in their educational program.

Because the health examinations were not given at approximately the same time during the year, this might account for the large percentage of increase in throat defects over the eight-year period, especially during those years when the examinations were given in January.

Recommendations

1. The author recommends that more emphasis be placed on health education in all grade levels. Specifically:
   a. Better health habits should be formed.
   b. Physical education people and all other teachers should be required to review the health examinations.

c. Teachers should become more alert in determining defects among the students.

d. More emphasis should be placed on sex education and venereal disease.

e. All schools should have a school health nurse at their disposal.

2. The author recommends that students be required to have physical examinations upon entering school and before graduation by a qualified medical doctor to supplement the present program.

3. It is recommended that more studies such as this be done in other school systems of the state.

4. The author recommends that health nurses be more specific in listing and defining physical defects.

5. The author also recommends that data such as has been found in this study could be most useful to physical educators and all other teachers in implementing these deficiencies with their own educational programs. For example:

a. Employ corrective exercises in physical education.

b. Adapt or modify physical education activities.

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