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Assessment of Students' Knowledge and Practice regarding Physical Impairments at Helwan University

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ABSTRACT

Background: Physical impairment is a disability that limits a student's physical capacity to move, coordinate actions or performs physical activities. It is accompanied by difficulties in one or more of the following areas: physical and motor tasks, independent movement, and performing daily living functions. **Aim:** This study aimed to assess the student s' knowledge and practice regarding physical impairments at Helwan University. **Research hypothesis:** Descriptive research design was used in this study. **Sample:** Purposive sample include 118 students, who suffering from physical impairment. **Setting:** Excellence center for students with disabilities, three faculties (College of Commerce, college of literature, and the college of law), and emergency clinics at Helwan University. **Tools for data collection:** One tool included four parts, **1st:** Interview questionnaire include socio-demographic characteristic, **2nd:** Past and present history of student with physical impairments, **3rd:** Students' knowledge of student with physical impairments, **4th:** Students reported practice. **Results:** Show that 80 % of studied subjects had good total knowledge about physical impairments. While 15 % of them had fair total knowledge about physical impairments. While 5 % of studied subjects had poor total knowledge about physical impairments, 63.6 % of the studied subjects had insufficient reported practices about physical impairments and that insufficient reported practices were improved about physical impairments where, it became only 1.7 %, the percentage of the studied subjects who had sufficient reported practices were became 98.3%.**Conclusion:**The current study concludes that the most of studied sample had unsatisfactory level of knowledge and practice about assessment of physical impairment, the majority of students had physical and psychological status. **Recommendations:** Health educational program about students with physical impairment that would help students to improve their knowledge, practice and general health condition.

Key words: Physical Impairments, Knowledge, Practice, Students.

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Introduction

Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by a student in executing a task or action; while a participation restriction is a problem experienced by student involvement in life situations. Thus, disability is a complex phenomenon, reflecting an interaction between the features of a student's body and the features of the society in which he or she lives ***(Guralnik, et al., 2022).***

A physical impairment is a substantial and long-term condition affecting a part of a student's body that impairs and limits their physical functioning, mobility, stamina, or dexterity. Physical impairment is a disability that limits a student's physical capacity to move, coordinate actions, or perform physical activities. It is accompanied by difficulties in one or more of the following areas: physical and motor tasks, independent movement; performing daily living functions. Physical impairments can be temporary or permanent, fluctuating, stable, or degenerative, and may affect parts of the body or the whole of the body ***(Mor, et al., 2022).***

More than one billion people around the world (15 %) suffer from at least one type of disability. According to the Global Health Survey, 785 million people aged 15 or older (15.6 % of the population) have some form of disability***(Branch &Jette, 2021).***10.67% of persons who are five years and older, have disabilities ranging from some difficulties to cannot do any activity at all, while 2.61% of Egyptians, who are five years and older, have severe disabilities ***(According to the Central Agency for Public Mobilization and Statistics (CAPMAS), 2020).***

The loss of physical capacity results in the students having a reduced ability, or inability, to perform body movements such as walking, moving hands and arms, sitting and standing as well as controlling muscles. A physical disability does not necessarily stop from performing specific tasks, but makes students more challenging. Daily tasks taking longer to complete, such as getting dressed or difficulty gripping and carrying things ***(Branch &Jette, 2022).***

It is important to note that defining physical disability is not about the physical condition itself, but how it impacts daily life, such as the ability to carry out work activities. A student may be born with a physical disability or acquire it in life due to an accident, injury, illness, or as a side effect of a

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medical condition.Examples, of physical disability include cerebral palsy, multiple sclerosis, epilepsy, Carpal tunnel syndrome, amputations, and spinal cord injuries ***(Manton, 2022).***

Just as types of physical impairments and how to impact a student's daily life cause physical impairment to vary. Physical impairments can be caused by either hereditary, congenital, mobility impairment, visual impairment, hearing loss, or acquired reasons. A student with a hereditary or congenital physical impairment has had the condition since birth and developed the condition because of inherited genetic problems, and issues with muscle cells the person suffered an injury during birth. A student can acquire a physical impairment due to a number of reasons. These can be severe accidents, brain injuries, infections, diseases, and as a side effect of disorders and other medical conditions, such as stroke and dementia***(Reuben & Siu, 2020).***

Community health nurses recognize that the psychological well-being of the physically impaired adult has been linked to relationships and the ability to find meaning in life as well as to the importance of education and lifelong learning. What emerges is that every physically impaired person has different needs. There are many levels of impairment and inclusive personalized support that embrace both technologies and for which positive human interaction is required ***(Sonn, et al., 2020).***

Significance of the study

According to the United Nations Development Programmer, Egypt, there are 12 million persons with disabilities and the impact of disability extends to the families of the persons, there are about 36 million persons who are affected by disability, which makes up 35% of the total population in Egypt **(*WHO, 2020).*** The Ministry of Higher Education is aware of the importance of embracing students with special needs and includes them in society as active citizens able to make many achievements **(*Rehab, 2018).***

Students with a physical impairment have difficulty managing the distance between different learning activities and take a long time to ask or answer questions **(University of Cambridge, 2020).** So, physical impairment has been included in various targets and as a crosscutting issue in the 2030 Agenda for Sustainable Development. Efforts need to be stepped up to ensure that the goals and targets will be achieved for students with disabilities **(United Nations New York, 2019).**

The significance of exploring recent policy developments in Egypt is to address the support needs of disabled students. Community health nurses need to evaluate the ability of students with impairments to use the appropriate educational program and make modifications in teaching

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strategies to provide high-quality health care for them **(Barnes and Mercer, 2015; National League for Nursing, 2020).**

Aim of the study

This study aims to assess student s' knowledge regarding physical impairments at Helwan university through:

1- Assessing the knowledge of student s' knowledge regarding physical impairments.

2- Assess the quality of life for student s' regarding physical impairments.

3- Appraising the relation between demographic characteristics of the students and their total knowledge about physical impairments.

Research Questions

Q 1 - Do the students have knowledge about physical impairments?

Q 2 - Is there a relationship between the quality of life and physical impairments?

SUBJECTSANDMETHODS

Researchdesign:

A descriptive study was applied to achieve the aim of the current study.

Researchsetting:

This study was conducted in the students at the three faculties (College of Commerce, college of literature, and the college of law), boys emergency building and emergency building for girls.

Sample: Purposive sample was used in this study.

Subjects:

All available students suffering from physical impairments in three faculties were conducted in the study. 54 students will be selected from the College of Commerce, 45 students will be selected from the college of literature, and 19 students will be selected from the college of law. The total number of students was 118 students according to the following inclusion criteria; students' age from 18 to 30 years and students diagnosed with physical impairment, and exclusion criteria: students diagnosed with any other types of impairment.

Tools of data collection:

Data for this study collected by using the following one tool include:

Tool: An interview questionnaire:

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Data for this study collected by using a questionnaire sheet which designed by the researchers after reviewing related literature it included four parts:

Part I: Socio-demographic characteristics of students consisted of 12 items such as age, gender, marital status, academic year, place of residence, residence with, work by profession, monthly income, number of family members, number of rooms, crowding index, play a sport and participate in recreational trips.

Part (II): Medical history: It divided to 2 sub-items 13 closed ended questions as:

History of Family such as family members suffers from a motor disability, family members suffer from chronic diseases, genetic diseases in the family you had a problem during childbirth and are the father and mother relatives.

current complain including chronic diseases that type of disability, cause of disability, handicap time, place of disability, suffer from other diseases in general, think your health is now, health insurance (medical sector of the university) meets all your need, and have you had surgeries before.

Part III: Student's knowledge regarding physical impairment 15 closed ended questions as: concept of motor disability, concept of a motor handicap, causes of motor disability, types of movement disability, factors affecting movement disability, influencing factors of the physical impairment, ways of overcoming the problems, methods of prevention, medication, meaning of exercises, benefits of exercises, sources of knowledge, types of exercises, uses of exercises, contraindications of exercises, and time of exercises.

Scoring system, it included 15 questions; the answer score 2 point for complete correct answer, 1 point for an in-complete correct answer and zero point to in complete correct answer total 30 grades.

•The total scores for student's knowledge regarding physical impairment divided into three levels as the following:

- Poor knowledge < 50 % (< 15 score)
- Average knowledge 50 -70 % (15:21 score)
- Good knowledge > 70% (> 21 score).

Tool validity and Reliability:

A) Content Validity:

The revision of the tools for clarity, relevance, comprehensiveness, understanding and applicability was done by a panel of five experts from the community health nursing specialty Helwan to measure the content validity of the tools and the necessary modification done accordingly through add some

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question to assess the students' knowledge about physical impairment.All recommended modifications were applied.

B) Tool Reliability:

Reliability was applied for testing the internal consistency of the tool, by administration of the same tools to the same subjects under similar conditions two times. Answers from the repeated testing were compared (Test- re- test reliability was 0.82 for knowledge) and Cronbach's Alpha reliability was 0.890 for practice.

Ethical consideration:

Official permission to conduct the proposed study will be obtained from the Scientific Research Ethics Committee. Participation in the study is voluntary and subjects will be given complete full information about the study and their role before signing the informed consent. The ethical considerations will include explaining the purpose and nature of the study, stating the possibility to withdraw at any time, the confidentiality of the information where it will not be accessed by any other party without taking the permission of the participants. Ethics, values, culture, and beliefs will be respected.

Pilot study:

The pilot study done on 10 % of the sample equal 15 students to examine the clarity of questions and time needed to complete the study tools. Based on the results, no modification was done. Patients included in the pilot study included from the study because no modifications were done.

Field work:

A written approval letters obtained from the Dean of faculty of nursing, Helwan University for practice the study in the faculty of nursing. Written letter should be sent to the health directorate and director of the law faculty for conducting the study including the aim of the study to obtain the permission to visit the hospital and conduct the study, including the aim of the study. A written approval obtained from patient after the researcher introduces her for them and after explaining the purpose of the study.

Statistical Item:

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Upon completion of data collection, data computed and analyzed using Statistical Package for the Social Science (SPSS), version 24 for analysis. The P value set at 0.05. Descriptive statistics tests as numbers, percentage, mean standard deviation (SD), will be used to describe the results. Appropriate inferential statistics such as "F" test or "t" test used as well.

-Degrees of Significance of the results were:

- When P > 0.05, it is statistically insignificant difference.
- When P < 0.05, it is statistically significant difference.
- When P < 0.01 or P< 0.001, it is high significant difference.

Results:

Table (1):Reveals that,52.5 % of the studied subjects were male while, 47.5 % of them were female. 51.7 % of them aged from 20 to 21 years old and 44.9 % of them were at grade second. Moreover, 72.0 % of them lived in urban residence, 94.1% of the studied subjects were live with family and 57.62 % of them had not sufficient monthly income for basic needs.

Table (2): Shows that, 55.1% of studied subjects lived with five to six family members. 56.8 % of studied subjects were had three rooms. Also, 65.3% of crowding index were crowded and only 7.6 % were not crowded. 80.5% of the family members hadn't physical disabilities. Also, 77.1% of studied subjects were hereditary problems. Moreover, 52.6 % of studied subjects hadn't chronic diseases among the family members

Table (3): Clarifies that, 52.5 % of studied subjects had not suffer from problems during delivery, 90.7 %of studied subjects had physical disability. Moreover,47.5 %of studied subjects had disability from birth,47.5 %of studied subjects disability occurred during birth and 39.0 % of studied subjects had physical disability inlower limbs.

Figure (1): Shows that, 41 % of the studied subjects had average of the health status, 29 %of the studied subjects had good of the health status, 11 % of the studied subjects had poor of the health status.

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Table (4):Shows that,50% of the studied sample had poor knowledge about physical impairment. Also, 30% of the studied sample had average knowledge about physical impairment. While 20% of the studied sample had good knowledge about the physical impairment.

Table (5): Shows that, there was highly statistically significance in relation between students' total knowledge and total practice.

Table (1): Number and Percentage Distribution of the Studied Subjects according to Socio-demographic Characteristics (n=118).

Items	No.	%
Age		
≤ 19	**13**	**11.0**
20 – 21	**61**	**51.7**
22 – 23	**24**	**20.3**
≥ 24	**20**	**16.9**
Mean ± SD 21. 32 ± 2. 04		
Gender		
Male	**62**	**52.5**
Female	**56**	**47.5**
Grade		
First	**22**	**18.6**
Second	**53**	**44.9**
Third	**15**	**12.7**
Fourth	**28**	**23.7**
Residence		
Rural	**33**	**28.0**
Urban	**85**	**72.0**
Living		
Alone	**7**	**5.9**
With family	**111**	**94.1**

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Items	No.	%
Work		
Yes	14	11.9
No	104	88.1
Monthly income		
Insufficient	68	57.62
Sufficient	40	33.89
More than sufficient	10	8.47
Sports		
Yes	49	41.5
No	69	58.5
Recreational activities		
Yes	57	48.3
No	61	51.7

Table (2): Number and Percentage Distribution of the Studied Subjects according to Family and House Characteristics (n=118).

Items	No.	%
Family members		
≤ 4	34	28.8
5 – 6	65	55.1
≥ 7	19	16.1
Rooms		
≤ 2	40	33.9
= 3	67	56.8
≥ 4	11	9.3
Crowding index		
Over- crowded (≤ 1)	9	7.6

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Items	No.	%
Crowded (= 2)	77	65.3
Not crowded (> 2)	32	27.1
Family members with physical disability		
Yes	23	19.5
No	95	80.5
Family members with chronic diseases		
No	62	52.6
Diabetes Mellitus	13	11.0
Hypertension/Heart Disease	18	15.3
Thyroid Diseases	2	1.7
Allergies	3	2.5
Cancer	6	5.1
Musculoskeletal Diseases	5	4.2
Nervous System Diseases	5	4.2
Liver disease	4	3.4
Family members with hereditary problems		
Yes	27	22.9
No	91	77.1

Table (3): Number and Percentage Distribution of the Studied Subjects according to their Past Medical History (n= 118).

Past medical history	No.	%
Problems during delivery		
No	62	52.5
Yes (unidentified)	33	28.0
Prenatal hypoxia	14	11.9
Shoulder dislocation	5	4.2

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Past medical history	No.	%
Premature delivery	4	3.4
Related mother and father		
Yes	42	35.6
No	76	64.4
Type of disability		
Physical	107	90.7
Mental	11	9.3
Cause of disability		
Birth	56	47.5
Accident	28	23.7
Disease	34	28.8
Time of disability		
Since birth	56	47.5
Before the age of 15	44	37.3
After the age of 15	18	15.3
Location of disability		
Brain	12	10.2
Upper limbs	19	16.1
Lower limbs	46	39.0
Right side	8	6.8
Left side	4	3.4
Whole body	29	24.6

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Figure (1): Percentage Distribution of the Studied Subject regarding their Health Status(n=118).

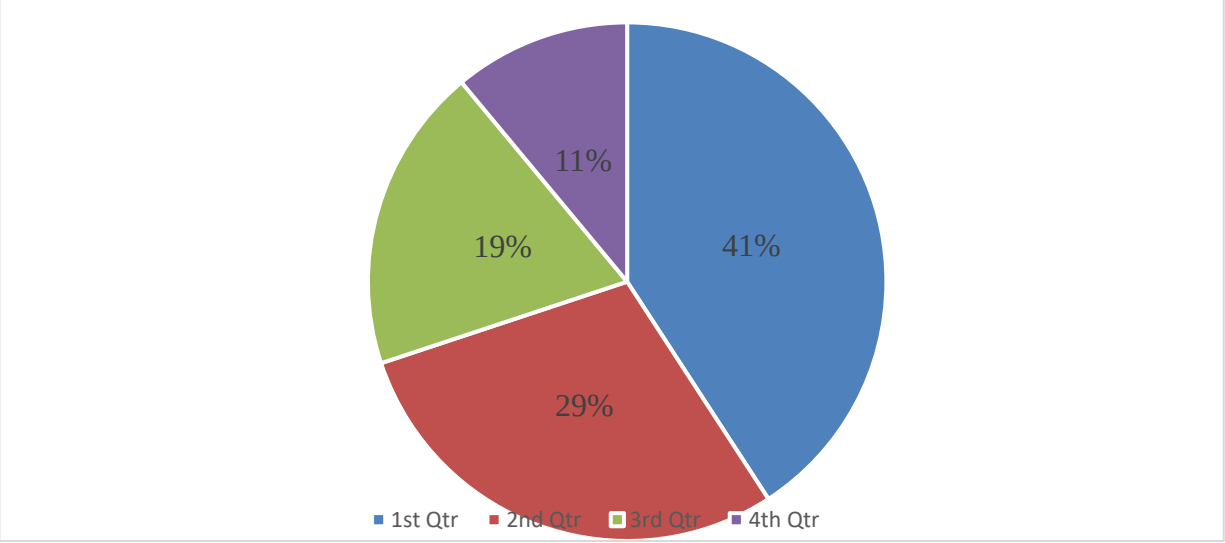

Table (4): Statistical Differences of Studied Subjects regarding to their Knowledge about Physical Impairments (n=118).

	Incomplete		Partially complete		Complete			
	No.	%	No.	%	No.	%		
Meaning of the physical impairment	64	54.2	41	34.7	13	11.0	101.156	(0.000**)
Meaning of disabled person	77	65.3	32	27.1	9	7.6	115.912	(0.000**)
Causesof the physical impairment	26	22.0	92	78.0	0	0.0	60.364	(0.000**)
Typesof the physical impairment	92	78.0	26	22.0	0	0.0	158.872	(0.000**)
Influencing factorsof the physical impairment	73	61.9	45	38.1	0	0.0	147.841	(0.000**)
Ways of overcoming the problems	67	56.8	51	43.2	0	0.0	156.413	(0.000**)
Methods of prevention	77	65.3	38	32.2	3	2.5	141.999	(0.000**)

** Highly statistically significant at p≤0.01

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Table (5): Relation between Studied Sample's total Knowledge, and their Total Practice (N=118)

Variables	Total knowledge scores						χ^2	P
	Poor (n =60)		Average (n =36)		Good (n =24)			
	No.	%	No.	%	No.	%		
Total reported practice:								
• Satisfactory practice (54)	4	6.6	30	83.4	20	83.4	12.447	.000**
• Unsatisfactory practice (66)	56	93.4	6	16.6	4	16.6		

* Significant < 0.05 ** High significant P= < 0.01 p .000**

Discussion

Physical impairment is a physiological disorder or condition, cosmetic disfigurement or anatomical loss impacting one or more body systems. Examples of body systems include neurological, musculoskeletal (the system of muscles and bones), respiratory, cardiovascular, digestive, lymphatic and endocrine." It goes on to say a "mental impairment is a mental or psychological disorder. It includes intellectual disability, emotional or mental illness, and organic brain syndrome **(Hawkes & Ruel, 2022).**

Demographic characteristics of the students.

The present study finding revealed that more than half of studied subjects were male and this finding was similar with **Pollock, et al., (2022)**who conducted published study at Australia under title of "Physical Impairment and Safety on Australian Health: Peoples' Perceptions of Major Hazards. " Reported that 54.1 % of studied subjects were males.

Concerning age, more than half of studied subjects had 20 to 21years, and this finding was in agreement with **Mary, et al., (2021)** who conducted published study at Midwestern entitled as "Knowledge, Attitudes, and Practices for nurses with Physical Impairments Students. in Ohio City, Midwestern " who reported that 52.3 % of studied subjects were 20 to 21 years. From researcher point view, this might be due to some of the students' aged between 21 to 25 years is in the university age.

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The present study finding revealed that more than two third of studied subjects were living with family and less than ten percent was living alone. This result was in accordance with **Saed, et al., (2020)** who conducted published study at Palestine entitled as " Knowledge and practices of Knowledge and practices for Nurses use among Physical impairment in the West Bank, Palestine" who reported that 91.2 % and 8.8 % of studied subjects were living with familyand living alone, respectively.From researcher point view, this might be due to the government raises family awareness towards people with special needs and how to provide them with all means with the support of the state.

Concerning the grade of education of the present study revealed that more than two third of studied subjects had in grade two this finding was similar with **Hagel, et al., (2022)** who conducted a published study at Vietnam entitled as" Prevention of Hazards toward Physical Impairments: an evaluation of an education-based intervention. Injury Prevention in Southeast Asia in Vietnam " who conducted cross-sectional study directed among the people with physical disability in Vietnam and founded that 45 % participantshadin grade two.

Concerning the monthly income of the present study revealed more than half of studied subjects had insufficient monthly income and this finding was in agreement with **Bassi, et al., (2021)** who conducted a published study at Kaduna State in Nigeria entitled as ″ Risk Factors for Physical Impairments and Accommodate with Disability, Kaduna State, Nigeria. ″ Who stated that 55.2 % of studied subjects were insufficient monthly income. From researcher's point of view, this might be due to increase in prices and the large number of basic needs for people with special needs and the large number of requirements

The present study finding revealed that more than half of studied subjects were family members from 5 to 6 members in the family. This result was in accordance with **Mulu, et al., (2021)** who conducted published study at Northwest Ethiopia entitled as " Knowledge, Attitude, and Practices among toward People with Physical Disability, Northwest Ethiopia" who reported that 54.2 % of studied subjects were family members over 5 members in the family.From researcher point view, this might be due to the family works to increase the number of births, because children are considered a source of strength and support for them in life.

The present study finding revealed that more than two third of studied subjects weren't family members with physical disability in the family. This result was in accordance with **Parry, (2021)** who conducted published study at Viet Nam entitled as " The rehabilitation of physical Impairment

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people in, Viet Nam" who reported that 78.2 % of studied subjects weren't family members with physical disability in the family.From researcher point view, this might be due to increase families' awareness of the causes that lead to disability. The state's interest in pregnant women and helping them to give birth safely.

Medical history of the students with physical impairment:

Regard the past medical history for students the results of the present study showed that more than half ofstudied subjects hadn't have problems during delivery and this finding was the same direction with **Heitor&Pellegrina, (2022)** who conducted a published study in Brazil under title ″Productivity of People with Physical Impartments: Evidence from Brazil ″who reported that, 55 % of studied subjects hadn't have problems during delivery. From researcher's point of view, this might be due toincreasing awareness and using modern methods during the birth of mothers.

Concerning the relation between mother and father, the results of the present study showed that more than half of studied subjects were recently not had a relationbetween mother and father and this finding was the same direction with **Michiel, et al., (2020)** who conducted a published study in Ethiopia under title ″Reducing the Hazards between Husband in Ethiopia: Decomposition and policy simulation ″who reported that 55.2 % of studied subjects were recently not relation between parents.From researcher's point of view, this might be due to reduce bad habit asconsanguineous marriage that leads to the emergence of genetic diseases and problems among family members.

Concerning the type of disability, the present study results delineated that more than two third of studied subjects had physical disability result from agriculture work to farmer and this finding agreement with **Aparna & Gopal, (2020)**who conducted published study at Indian under title "Physical Impairment related Hazards in Elderly People "who reported that, 89 % of studied subjects had actual injures and hazards result from agriculture work.From researcher's point of view, this might be due to severe accidents, brain injuries, infections, diseases and as a side effect of disorders and other medical conditions, such as a stroke and dementia.

Also, the present study revealed that less than quarter of studied subjects had location of disability in whole body and this finding was agreement with **Alene &Manyong, (2021)** who conducted published study at northern Nigeria under title " Physical Impairment and its Location in northern Nigeria "who reported that, 23.2 % of studied subjects had location of disability in whole body. From researcher's point of view, this might be due to arthritis is the most common cause of

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disability for adults. It often worsens as someone gets older. If someone has another disability, they also are more likely to have arthritis.

The presented study showed that more than two third of studied subjects not had rehabilitation programs for disability and this finding agreement with **Deng, et al., (2021)** who conducted published study at China under title of " Impact of rehabilitation programs on people with Physical Impairment in China " who reported that 79 % of studied subjects not had rehabilitation programsfor disability.From researcher's point of view, this might be due totheir take a long time andPeople think it gives less efficiency.

Part III: Students Knowledge about Physical Impairments:

The present study showed that less than quarter of studied subjects had correct answer about meaning of physical impairment regarding pre physical impairment health educational program and this finding was in accordance with **Maanda, et al., (2023)** who conducted published study at Vhembe District in South Africa under title "The Determinants of hazards Facing People with Physical Impairment, South Africa" who reported 12.1 % of studied subjects had correct answerabout meaning of physical impairment.From researcher's point of view, this might be due todecrease awareness of people with physical disability.

The present study displayed more than two third present of studied subjects had corrected answer about types of the physical impairment post physical impairment educational program and this finding was disagreement with **Javier, et al., (2023)** who conducted published study at Spanish under title of " The Role of government toward People with Physical Impairments " who reported 65 % of studied subjects had correct answer. From a researcher's point view, this might be dueto major of them didn't important withidentify different physical disabilities.

As regard students' knowledge about ways of overcoming the problems post physical impairment educational program more than two third of studied subjects had correct answer about ways of overcoming and this finding was agreement with **Jeremiás&Tamás (2023)** who conducted published study at Brazil under title of " Effects of Physical Disabilities about Family Income "who reported 79 % of studied subjects had correct answer and complete. From a researcher's point view, this might be due to people know how to preventphysical impairment.

Also, as regard students' knowledge about physical impairment post educational program more than half of studied subjects had correct answer about causes of the physical impairment and this finding

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was agreement with **Xueshen, et al., (2023)** who conducted published study at Indonesia under title of " Concept of Physical Impartment and Family Perception " who reported 70.2 % of studied subjects had correct answer and complete. From a researcher's point view, this might be due to physical impairment educational program be more effective and people understand causes lead to impairment.

Also, as regard students' knowledge about physical impairment post educational program more two third of studied subjects had correct answer about benefits of exercises related to physical impairment and this finding was agreement with **Ghenghesh, et al., (2019)** who conducted published study at Mediterranean north Africa under title of " Concept of Physical Impartment and Society Role toward Disability People "who reported 78.2 % of studied subjects had correct answer and complete. From a researcher's point view, this might be due to physical impairment educational program be more effective and people understand benefits of exercises related to physical impairment.

As regard total level of knowledge more than two third ofstudied subjects had good knowledgepost applied physical impairment educational program and this finding wasagreement with **Harun, et al., (2023)** published study at Malesia under title of " Management of Physical Disability People and Rehabilitation "who reported 79.1 % ofstudied subjects had good knowledge. From researcher's point ofview, this might be due to more third of studied subjects of thecurrent study were high educational level and this help them to increase perception and knowledge.

Regarding the effective of the program on total knowledge studied subjects, the present study revealed that there was statistical significant difference (improvement) between pre and post program in all knowledge items and this finding was in the same line with **Maanda, et al., (2023)** whose conducted published study at Health Clinics in the Vhembe District, South Africa under title of " The Determinants of Physical Impairment and Effects on Family Member in the Vhembe District, South Africa"who revealed that there significant improvement in the knowledge of studied subjects after application of the health education intervention.

Also, concerning the effective of the program on total knowledge studied subjects, the present study revealed that there was statistical significant difference between pre and post program implementation in all knowledge items this finding was supported with **Roberto, et al., (2023)** whose conducted published study in a Mediterranean Environment under title of "Role of Community People toward Physical Impairment in a Mediterranean Environment–a cross-sectional study" who reported there statistical significant difference between pre and post implementation program in the

knowledge of studied subjects and recommended with continuous supporting individuals with disabilities and working to help them to become productive individuals interacting with others.

Conclusion:

The current study concludes that students' knowledge, half of the studied sample had poor knowledge about physical impairment. Also, more than quarter of the studied sample had average knowledge about physical impairment. While less than quarter of the studied sample had good knowledge about physical impairment. Regarding to students' practice, less than half of the studied sample had a satisfactory level in total students' practice. While more than half of them had unsatisfactory total students' practice. Regarding to students' attitude, minority of the studied sample had negative total attitude about physical impairment. While majority of the studied sample had positive total attitude. There was statistically significant relation between students' sociodemographic data and their knowledge, practice and attitude regarding physical impairment.

Recommendations:

Health educational program about students with physical impairment that would help students to improve their knowledge, practice and general health condition.

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