Needs and Problems of Students with Disabilities Enrolled in Inclusive Governmental Schools in Ismailia city

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Abstract

Background: Students with disabilities have numerous daily living, health care, psychological, social, educational, and environmental problems and unmet needs. **Aim of the study:** Assess needs and problems of students with disabilities enrolled in inclusive governmental school in Ismailia city**. Design:** A descriptive design was utilized in this study. **Setting:** The present study was conducted in nine inclusive governmental schools in Ismailia city. **Sample:** A purposive sample of 163 students with disabilities and their parents. **Tools of data collection:** Two tools named tool I structured interview questionnaire about personal characteristics of disabled students and their parents, disability profile, needs and problems of disabled students, tool II school physical environment observational checklist. **Results:** Showed that 93.9% of the studied students their needs were unmet also, more than half 59.5% of the studied students had many problems and the majority 89% of the observed schools had fair environmental condition for inclusion of disabled students. **Conclusion:** Students with disabilities in inclusive governmental schools encountered a varied range of problems and had several unmet needs. Also, there was statistically significant difference between studied student's educational level and their needs and problems. **Recommendations:** Educational program in schools for students with disabilities about healthy lifestyle, hygienic practices, dental care, and routine physical checkup.

Key words: - Disability, Enrollment, Inclusive schools, Needs, Problems.

1. Introduction

Disability is defined as physical, mental, cognitive, or developmental condition that impairs, interferes with, or limits a person's ability to engage in certain tasks or actions or participate in typical daily activities and interactions. According to the World Health Organization, disability has three dimensions including impairment which is defined as a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action: while a participation restriction is a problem experienced by an individual in involvement in life situations **(Perez et al., 2023).**

Childhood disability is a global challenge that continues to be a critical public health issue across the world. Reliable definitions are still insufficient to measure childhood disability. Generally, disabled children who are unable to lead normal life due to physical and mental defects and this condition can limit their development, social participation, and result in poor health and employment outcomes **(Trost et al., 2021).**

Students with disabilities need the care of a loving, growing up in a safe and happy climate, time with friends and access to a wide range of life experiences. Also, they need to be protected against exploitation, violence, and abuse. Moreover, they need access to health care services including health promotion and preventive care **(Clark et al., 2020).**

Disabled students experience poor level of health, unmet health care needs and more likely to have sleep problems than those without disability. Additionally, students with disabilities are the world most stigmatized and excluded children. As a result of this discrimination, they may have poor educational outcomes, low self-esteem, and limited interaction with others **(Smythe, Adelson, and Polack, 2020).**

The Global Education Report estimated that more than fifty percent of students with disabilities do not go to school and are excluded from education. So, different modalities of education were adopted for students with disabilities beginning with segregation, integration, and inclusive education. Inclusion is seen as a universal human right and is defined as "a process of concentrating and responding to the variety of needs of the learners and limiting exclusion within and from education. The main goal of the inclusion was to provide education chances for disabled children **(Bose & Heymann, 2020).**

Moreover, inclusion provides opportunities for all students to learn from each other and expand their academic, psychological, emotional, and social life. On the other hand, some students are unable to mentally access the curriculum and the training of the educator as the general teacher may not fulfill the skills needed for effective communication with disabled students **(Babik & Gardner, 2021).**

Community health nurses are in the perfect position to help students with disabilities as they provide them with supportive guidance to promote their health

and prevent risk behaviors through preventive health practices. Additionally, they provide teaching opportunities to parents of disabled students about their children's condition, treatment options and physical therapy programs Moreover, they help students with disabilities to see the strengths they may have to assist them toward self-actualization and average self-esteem **(Iriarte-Roteta et al., 2020).**

Significance of the Study:

Globally, WHO estimated about 1.3 billion people to experience some form of disability and they correspond about 16% of the world's population. Additionally, UNICEF estimation of the number of children with disabilities is almost 240 million children or one in every 10 children worldwide. Based on the latest statistics from the Central Agency for Public Mobilization and Statistics, there were more than 20 million Egyptians with disability. While, in children they represent 10.6 of total population. In Ismailia city, they represent 2.5 percent of total population **(Central agency for public mobilization and statistics, 2021; The United Nations International Children's Emergency Fund, 2021; World health organization, 2023).**

Based on the previously mentioned statistics, the study aimed to assess the needs and problems of students with disabilities enrolled in inclusive governmental school in Ismailia city.

The aim of the study:

The study aimed to assess the needs and problems of students with disabilities enrolled in inclusive governmental schools in Ismailia city.

Objectives of the study:

1.Identify the needs of students with disabilities enrolled in inclusive governmental schools in Ismailia city.

2.Determine the problems of students with disabilities enrolled in inclusive governmental schools in Ismailia city.

3.Assess the school's physical environment appropriateness for students with disabilities enrolled in inclusive governmental schools in Ismailia city.

Research question:

1.What are the needs of students with disabilities enrolled in inclusive governmental schools in Ismailia city?

2.What are the problems of the students with disabilities enrolled in inclusive governmental

schools in Ismailia city?

3.Is the school's physical environment appropriate for students with disabilities enrolled in inclusive governmental schools in Ismailia city?

4.Is there a relationship between students' socio demographic characteristics, disability profile, and their needs and problems?

2. Subject and Methods

Study design:

A descriptive study design was applied in this study.

Study setting:

The study was conducted in nine inclusive governmental schools in Ismailia city which were selected from fourteen secondary governmental schools representing the two educational zones in Ismailia city: - North and South Ismailia Educational directorate. Schools with the largest number of enrolled students with disabilities were selected as the following: seven schools were selected from North Ismailia educational directorate, and two schools were selected from South Ismailia educational directorate.

Study sample:

A purposive sample of 163 students with disabilities and their parents.

Tools of data collection:

Tool (1): Structured interview questionnaire: **(Tan, 2016; Kilincaslan et al.,2019; Ainscow, 2020; Cacioppo et al.,2021; Roberts & Webster, 2022).** It consisted of four parts: -

Part 1: Sociodemographic characteristics of students with disabilities and their parents: -

-Socio-demographic characteristics of students: It consisted of 5 questions including age, gender, educational level, birth order, and number of siblings .

-Socio-demographic characteristics of student's parents: It consisted of 10 questions including consanguinity between the parents, marital status of the parents, the parents' education and work, the source of family income, crowding index, and type of housing.

Part II: Student's disability profile: It consisted of 9 questions including type of disability, IQ level, onset of disability, causes of disability, rehabilitative services, disability follow-up visits, usage of any assistive devices and receiving disability related information.

Part III: - Disabled students' needs as reported by themselves and their parents. It consisted of 40 questions that classified into six domains including daily living activities needs (questions 1-10), health care needs (questions 11-15), psychological needs (questions 16-24), social needs (questions 25-30), educational needs (questions 31-34) and environmental needs (questions 35-40) .

Scoring system: Responses to each statement either yes which score 1(having unmet need), and no score zero (having met need); giving a total score range from 0-40. The higher score means the more unmet needs the student had.

Reported total needs score as: - Unmet needs = 28-40 scores, partially met needs = 14-27 scores, and fully met needs=0-13 scores.

Part IV: - Disabled students' problems as reported by themselves and their parents. It consisted of 27 questions that classified into six domains including daily living activities problems (questions 1-3), health care problems (questions 4-7), psychological problems (questions 8-13), social problems (questions 14-19), educational problems (questions 20-23), and environmental problems (questions 24-27).

Scoring system: Responses to each statement either yes which score 1 (having a problem), and no score zero (don't have a problem), giving a total score range from 0-27. The higher score means the more problems the student had.

Reported total problems score as: - No/few problems=0-9 scores, some problems= 10-18 scores, and many problems= 19-27 scores.

Tool II: - School physical environment observational checklist: **(Azab, 2016; Bambara & Kern, 2021).** It includes two parts:

Part I. General characteristics of the studied schools: It consisted of 9 questions including school location, school surroundings, transportation around the school, the number of sessions in the school and the existence of special education teacher.

Part II: School physical environment observation data: It consisted of five elements including school building characteristics (questions 1-9), school classes (questions 10-18), resources room (questions 19-20), bathrooms (questions 21-23), and crisis outlet (questions 24-25).

The total score was calculated and categorized into three levels as follows:

Poor environment 0-8, fair environment 9-17

and good environment 18-25.

Field work:

At the school mentioned previously, the researcher introduced herself to the study subjects then take informed consent from the participants (because disabled children are considered from vulnerable populations, the informed consent was taken from their parents through taking their telephone numbers from school director or through their existence in school environment and explained the aim and nature of the study to take their acceptance for involvement of their children)

Pilot study:

A pilot study was carried out on 10% of the sample (16 students with disabilities and their parents) before actual data collection and lasted for one month. Data obtained from the pilot study were analyzed. According to its results, items corrected, modified, omitted, or rearranged then the tools were finalized. It also helped in estimating the time needed for interviews and evaluating the appropriate setting to perform the interview. The sample involved in the pilot study was excluded from the study sample to ensure the stability of answers.

Ethical considerations:

The study was conducted after a formal approval of the Research Ethics Committee (REC) in the Faculty of Nursing Suez Canal university by code 163 on date 6/12/2022. The agreement for participation of students and their parents was made after explanation the aim and nature of the study. Assuring the students and their parents that participation in the study voluntary, also they were assured that the information would renowned confidentiality and used for the research purpose only, and they have the right to refuse participation and withdrawal from the study at any time.

Data analysis:

Data collected were coded, entered and analyzed using Statistical Package for the Social Sciences (SPSS version 21). Descriptive statistics, such as mean, standard deviation (SD), frequency, percentage were used. Chi Square test was used for categorical data. Correlations were used to test relationships between different variables. P value was set at <0.05 for significant results.

3. Results

Table (1) shows that 46.6 % of the studied students aged 15 years with mean ±SD of age 15.93±1.53 years old. With respect to student gender, 62 % of students were male. Regarding their educational level, 51.5 % of

them were at 2nd secondary stage. Also, 57.7 % of the students were ranked as the first child within their families. Moreover, 47.9 % of studied students had one sibling.

Table (2) illustrates that the studied student's daily living needs were unmet with Mean ± SD 6.75±.91. It can be noticed that all students mentioned that developing life skills as unmet needs. Concerning health care needs, the studied students reported that they were unmet with Mean ±SD 4.55±.72. Referral to suitable rehabilitation services for disability was stated by 95.1 % as unmet needs. Regarding psychological needs, the studied students reported that they were unmet with Mean ± SD 7.91±.97. Feeling of joy and happiness was the first unmet need as stated by all the studied students 100% followed by counselling and psychological care with 93.3%.

Table (3) shows that the studied student's environmental needs were unmet with Mean±SD 5.84±1.51. It can be noticed that 95.1% of the studied students stated that sitting in the classroom at the beginning are unmet needs. As regard to social needs, the studied students reported that they were unmet with Mean ±SD 5.18±.78. Moreover, 91.4 % of studied students reported that dealing with people in a good manner and understanding them correctly as unmet needs. With respect to educational needs, the studied students stated that they were unmet with Mean ±SD 3.71±.55. Also, 95.1% of the studied students equally mentioned that increasing skills and educational abilities and presence of teaching facilities as unmet need.

Figure (1) describes that, 93.9% of the studied students their needs were unmet while 6.1 % of them had partially met needs.

Table (4) shows that the studied students had daily living problems with Mean ±SD 1.22±1.02. Irregular sleeping hours or short periods of sleep stated by 44.2 % of the studied students. As regards health care problems, the studied students had many problems with Mean±SD 3.21±.75. 91.4 % of the studied students not receiving appropriate rehabilitation services for disabilities. Concerning psychological problems, the studied students had many problems with Mean ±SD 4.01±1.23. Constant exposure to violence stated by 87.1% of them.

Table (5) shows that the studied students had many social problems with Mean±SD 4.91±.92. 89.6% of the studied students reported that they did not participate in school activities. As regards educational problems,

the studied students had many problems with Mean±SD 3.08±.65. Poor academic level was stated by 97.5 % of the studied students. With respect to environmental problems, the studied students stated that they had many problems with Mean ±SD 2.51±1.83. The difficulty of reaching the school stated by 68.1 % of the studied students.

Figure (2) shows that 59.5 % of the studied students had many problems while 40.5% of them had some problems.

Table (6) shows that there was significant difference between studied student's educational level and their needs (P =.05). While there was no statistically significant difference between studied student's age, gender, birth order, sibling's number, consanguinity between parents and family income and their needs as P>.05.

Table (7) shows that there was significant difference between studied disabled student's educational level and their problems (P =.027). While there was no statistically significant difference between studied student's age, gender, birth order, sibling's number, consanguinity between parents and family income and their problems as P>.05.

Table (8) shows that there was significant difference between studied disabled student's disability profile and their problems (p =.026). While there was no statistically significant difference between studied student's IQ level, current rehabilitative services and causes of disability and their problems as P>.05.

Figure (3) describes that, 89 % of the observed schools had fair environmental condition, while 11 % of them had poor environmental condition.

4. Discussion

Disability, an umbrella term, including impairments, activity limitations, and participation restrictions. Students with disabilities need access to promotive, preventive, curative, rehabilitative and palliative health services. Also, they need love, support, and positive reinforcement to ensure that they emerge with a strong sense of self-worth, confidence, and the determination to keep going **(Mattson et al., 2019).**

Additionally, children with disabilities suffer from social isolation, discrimination, and face different forms of exclusion. Moreover, they are more likely to have problems with their sleep or behavior than

normal children that can interfere with participation in school and the community **(Nannan et al., 2019).**

As regard to age, the current study showed that, less than half of the studied students were fifteen years old with the mean ±SD of age 15.93±1.53. This result was in line with **Tarraf, Ali, and Baraka, (2018)** who found that, nearly half of the studied students are aged 15-17 years old. While this disagreed with Camden et al. (2020) who reported that, about one third of the students' aged 10-13 years old. This finding due to the beginning of secondary education in Egypt schools in the age ranged between 15-18 years old.

Regarding the student's gender, the current study showed that, two thirds of the studied students were male. This finding agreed with **Arakelyan, et al. (2020)** who illustrated that two thirds of the studied students were male. Meanwhile, this result was inconsistent with **Gebeyehu, Sahile, and Ayalew, (2019)** who reported that, less than three quarters of the studied students were female. This finding attributed to the statics of central agency for public mobilization and statistics in 2023 that 51.4% of total population is male aged between15-17 years old while 48.6 % is female and the gender ratio reached 105.9 males for every 100 females.

Regarding the educational level of the studied students, the present study illustrated that, half of the studied students were in the 2nd secondary stage. This finding is similar to the results of **Connor & Cavendish, (2020)** who reported that, more than half of the studied students were in the 2nd secondary stage. On the other hand, this result disagreed with **Wang, (2019)** who reported that the majority of the studied students in the preparatory stage. The researcher's point of view some types of disabilities are not identified or diagnosed until later stages of education that leads to higher numbers of disabled students in the secondary stage.

Concerning birth order of the studied students, the present study showed that, more than half of the students were ranked as the first child within their families. This finding came in agreement with **Leane, (2019)** who stated that, more than half of the students were ranked as the first child within their families. This result disagrees with **Singal, et al. (2020)** who revealed that, less than one quarter of the studied students were ranked as the first child within their families. The

researcher's point of view the neglection or unawareness of newly parents for premarital examination and counseling for prevention and early detection of congenital anomalies increase risk for disability formation .

As regard to sibling's number of the studied students, the findings of the current study showed that, nearly half of the studied students had one sibling. This finding seems to be consistent with **DeVries & Sunden, (2019)** who reported that half of the studied students had one sibling. The current finding was not in a line with **Avieli, Band and Araten, (2019)** who reported that less than one third of the studied students had one sibling. The researcher's point of view the impact of disability of first child on the family may force them to delay, made a space between siblings or birth control remains a female dominated decision**.**

Concerning the daily living needs of the studied students, the present study revealed that all the studied students mentioned that developing life skills as an unmet need. This finding was in accordance with **SHENG, et al. (2020)** who reported that the majority of the students mentioned developing life skills as an unmet need. Meanwhile, this result was inconsistent with **Kilincaslan, et al. (2019)** who reported that about half of the studied students mentioned needs for developing life skills as partially met need. These results related to lack of the necessary support systems, including mentors, counselors, or community programs, to guide disabled students in developing and practicing life skills.

With reference to health care needs of the studied students, the current study showed that the majority of the studied students reported that referral to suitable rehabilitation services for disability as unmet need. This finding agreed with **Akın, et al. (2020)** who reported that the majority of the studied students reported that access to health care for follow-up as unmet need. On the other hand, this finding disagreed with **Marlow, Servili, and Tomlinson, (2019)** who reported that about half of the studied students mentioned that their needs for referral to suitable rehabilitation services for disability as met need. The researcher's point of view the quality of services rendered by the health insurance system, economic constraints and perceived no benefits of follow up sheds light on critical factors influencing healthcare utilization .

Regarding psychological needs of the

studied students, the current study showed that all the studied students mentioned that feeling of joy and happiness as unmet need. This finding was in line with **Mitchell, Kern, and Conroy, (2019)** who reported that the majority of disabled students reported that feeling of joy and happiness as unmet need. The researcher's point of view social isolation, bullying and discrimination, limited access to recreational activities, lack of inclusive events and positive role models highlights critical factors that can significantly impact the well-being of individuals.

Concerning social needs of the studied students, the current study showed that the majority of the studied students reported that dealing with people in a good way and understanding them correctly as unmet needs. This finding was in line with **Aldersey, et al. (2020)** who reported that the majority of the studied students reported that dealing with people in a good way and understanding them correctly as unmet needs. On the other hand, this finding disagreed with **Mamas, et al. (2020)** who reported that three quarter of studied students mentioned that they were more likely to form support ties with each other and receive friendship ties with others. The researcher's point of view lack of awareness about disabilities may contribute to misunderstandings, stereotypes, and misconceptions, making it difficult for others to interact with disabled students in a positive way.

With respect to educational needs of the studied students, the present study revealed that the majority of the studied students mentioned that increasing skills and educational abilities and presence of teaching facilities as unmet need. This finding agreed with **Miciak & Fletcher, (2020)** who reported that the majority of the studied students mentioned that increasing skills and educational abilities and presence of teaching facilities as unmet need. While this disagreed with **Schwartz, Hopkins, and Stiefel, (2021)** who reported that more than three quarters of the studied students' academic achievements were not negatively affected by their disabilities. The researcher's point of view the limited access to specialized education, insufficient teachers' training, lack of accessible and adaptive learning materials underscores crucial challenges in providing effective education for disabled students.

As regard environmental needs of the

studied students, the present study revealed that the majority of the studied students mentioned that sitting in the classroom at the beginning are unmet needs. This finding agreed with **Roberts & Webster, (2022)** who reported that the majority of the studied students mentioned that sitting in the classroom at the beginning are unmet needs. In contrast, **Maciver, et al. (2019)** who reported that about half of the studied students mentioned their access to buildings and classrooms of the school was easy and not affected by their disability. The researcher's point of view on the unmet needs related to sitting in the classroom at the beginning suggests a recognition that there are challenges or deficiencies in the learning environment for disabled students .

Concerning the daily living problems of the studied students, the present study revealed that more than one third of the studied students had irregular sleeping hours or short periods of sleep. This finding was in accordance with **Al-Farsi, et al. (2019)** who stated that more than one third of the studied students had irregular sleeping hours or short periods of sleep. Meanwhile, this result was inconsistent with **Löwing, Gyllensvärd, and Tedroff, (2020)** who reported that sleep problems were not present in more than two thirds of the studied students. The researcher's point of view that many factors might make it difficult for disabled students to create a sleep-conducive environment such as pain and suffering from poor physical health and adverse effect from medication.

With reference to health care problems of the studied students, the current study showed that the majority of the studied students reported that they were not receiving appropriate rehabilitation services for their disability. This finding agreed with **Adugna, et al. (2020)** who reported that the majority of the studied students reported that they were not receiving appropriate rehabilitative services for their disability. On the other hand, this finding disagreed with **Magnusson, Sweeney, and Landry, (2019)** who reported that about half of the studied students use several approaches of rehabilitation services. The researcher's point of view the financial constraints limit disabled students' ability to afford rehabilitation services, including costs associated with therapy sessions and specialized equipment.

Regarding psychological problems of the studied students, the current study showed that more than three quarters of the studied

students were suffering from constant exposure to violence and abuse. This finding was in line with **Christoffersen, (2019)** who reported that three quarters of the studied students were suffering from constant exposure to violence and abuse. This result disagreed with **Bambara & Kern, (2021)** who reported that about two thirds of the studied students receive continuous support and psychological counseling. These results attributed to disabled students may experience social isolation or exclusion, making them more susceptible to abuse and systemic discrimination.

Concerning social problems of the studied students, the current study showed that more than three quarters of the studied students reported that they were not participating in school activities. This finding was in line with **Stanish, et al. (2019)** who reported that that the majority of the students were not participating in school activities. This may be due to vulnerability disabled students to bullying or harassment, inadequate support systems can contribute to feelings of isolation and social difficulties.

With respect to educational problems of the studied students, the present study revealed that the majority of the studied students had poor academic level. This finding agreed with **Gilmour, Fuchs, and Wehby, (2019)** who stated that the majority of the studied students had poor academic level. While this disagreed with **Schwartz, Hopkins, and Stiefel, (2021)** who reported that more than three quarters of the studied students' academic achievements were not negatively affected by their disabilities. The researcher's point of view inadequate implementation of inclusive education practices may lead to a lack of accommodations and support tailored to the individual needs of disabled students resulting in hindering their academic progress.

As regard environmental problems of the studied students, the present study revealed that more than two thirds the studied students mentioned that there was a difficulty of reaching the school. This finding agreed with **Belay & Yihun, (2020)** who reported that more than half of the studied students mentioned that there was a difficulty of reaching the school. In contrast, **Gin, et al. (2020)** who reported that about half of the studied students mentioned that buildings and classrooms were accessible. The researcher's point of view inaccessibility of physical infrastructure, such as lack of ramps,

elevators, or appropriate pathways, can hinder the mobility of disabled students and make it challenging for them to reach school independently.

Regarding relation between studied disabled student's sociodemographic characteristics and their needs, the current study showed that there was statistically significant difference between studied disabled student's educational level and their needs. This finding agreed with **Toseeb, et al. (2020)** who revealed that there was statistically significant difference between studied disabled student's educational level and their needs. On the other hand, this result disagreed with **Scherer, Verhey, and Kuper, (2019)** who reported that there was no statistically significant difference between studied disabled student's educational grade and their needs. This result highlights addressing specific needs during the early stages of education can contribute to building a strong foundation and potentially mitigating challenges that may arise in later educational phases which contributes to a more inclusive and effective educational experience for disabled students.

With reference to relation between studied disabled student's sociodemographic characteristics and their problems, the current study showed that there was statistically significant difference between studied disabled student's educational grade and their problems. This agreed with **Morgan, et al. (2019)** who reported that that there was statistically significant difference between studied disabled student's educational grade and their problems. On the other hand, this result disagreed with **Graham, et al. (2020)** who stated that there was no statistically significant difference between studied disabled student's educational grade and their problems. The researcher's point of view the presence of problems may be linked to unmet educational needs and when disabled students face challenges in accessing appropriate educational resources, it can impact both their academic performance and the occurrence of problems.

The current study revealed that the majority of the observed schools had fair environmental conditions for inclusion of the students with disabilities. This agreed with **Ackah-Jnr & Danso, (2019)** who mentioned that the majority of observed schools had fair environmental conditions for inclusion of the students with disabilities. On the other hand, this finding disagreed **Van Mieghem, et al. (2020)** who reported that the majority of

observed schools had poor environmental conditions for inclusion of the students with disability. The researcher's point of view the physical and organizational aspects of the school environment are generally conducive to accommodating the needs of students with disabilities**.**

5. Conclusion:

Based on the findings of this study, the results concluded that: -

- Students with disabilities have numerous unmet daily living, health care, psychological, social, educational, and environmental needs. Additionally, students with disabilities suffer from many daily living, health care, psychological, social, educational, and environmental problems.

- Most of the observed schools had fair environmental condition for inclusion of disabled students that may poses barriers for full school participation of disabled students.

- There was significant positive correlation between total problems score and total needs score as reported by the studied students and school personnel .

- Additionally, there was statistical significant difference between studied student's educational level and their needs and problems . Moreover, there was statistical significant difference between studied disabled student's disability profile and their problems.

6. Recommendations:

- Educational program in schools for students with disabilities about healthy lifestyle, hygienic practices, dental care, and routine physical checkup utilizing appropriate methods and educational strategies .

- Educational programs for couples before marriage about the importance of preconception care to improve their health status and reduce behaviors that could contribute to poor maternal and child health outcomes.

- Educational programs about pre-natal periodical examination for parents during journey of pregnancy to detect congenital anomalies as early as possible.

-Comparative research studies about disabled needs and problems are needed among different age groups, and in different geographics.

Table (1): Frequency distribution of the studied students according to their sociodemographic characteristics (n=163).

Items	N	%
Age (Years)		
15 years	**76**	**46.6**
16 years	67	41.1
17 years	12	7.4
18 years	4	2.5
19 years	0	0
20 years	2	1.2
21 years	2	1.2
Mean ±SD	**15.93±1.53**	
Gender		
Male	101	**62.0**
Female	62	38.0
Educational level		
1st secondary stage	79	48.5
2nd secondary stage	84	**51.5**
3rd secondary stage	0	**0**
Birth order		
1st	94	**57.7**
2nd	51	31.3
3rd or more	18	11.0
Sibling's number		
None	10	6.1
One	78	**47.9**
Two	65	39.9
Three or more	10	6.1

Table (2): Frequency distribution of the studied students according to their daily living, health care, and psychological needs as reported by them and their parents (n=163).

Needs	Yes		No	
	N	%	N	%
Daily living needs: -				
Need for assistance in eating and drinking	60	36.8	103	63.2
Need for assistance in dressing	54	33.1	109	66.9
Need for assistance in mobility	41	25.2	122	74.8
Need for assistance in bathing	41	25.2	122	74.8
Need for assistance in taking a shower	155	**95.1**	8	4.9
Need for following a complete and healthy diet	151	92.6	12	7.4
Need for dental hygiene	142	87.1	21	12.9
Need for personal hygiene	140	85.9	23	14.1
Need for doing sports	153	93.9	10	6.1
Need for developing life skills	163	**100**	0	0
Mean±SD	**6.75±.91**			
Health care needs: -				
Need for obtaining health promotion and disease prevention services, such as vaccinations.	150	92.0	13	8.0
Need for referral to suitable rehabilitation services for disability	155	**95.1**	8	4.9
Need for regular follow-up visits for disability	149	91.4	14	8.6
Need for using appropriate health services to receive treatment when any health problem occurs	153	93.9	10	6.1
Need for routine medical examination	151	92.6	12	7.4
Mean±SD	**4.55±.72**			
Psychological needs: -				
Need for continuous support from others	148	90.8	15	9.2
Need for protection from being beaten and cursed	140	85.9	23	14.1
Need for good dealing from school peers	131	80.4	32	19.6
Need for good dealing from parent	141	86.5	22	13.5
Need for good dealing from teachers	142	87.1	21	12.9
Need for counselling and psychological care	152	**93.3**	11	6.7
Need for calmly guided when making mistake	150	92.0	13	8.0
Need for protection from being subjected to psychological abuse	125	76.7	38	23.3
Need for feeling of joy and happiness	163	**100**	0	0

Mean±SD	**7.91±.97**

Table (3): Frequency distribution of the studied students according to their social educational, and environmental needs as reported by them and their parents (n=163).

Needs	Yes		No	
	N	%	N	%
Social needs:				
Need for having a lot of friends	132	81.0	31	19.0
Need for having a lot of playing time	145	89.0	18	11.0
Need for taking many recreational trips	144	88.3	19	11.7
Need for participating in school activities	137	84.0	26	16.0
Need for increasing social network	138	84.7	25	15.3
Need for dealing with people in a good manner and understanding them correctly	149	**91.4**	14	8.6
Mean±SD	**5.18±.78**			
Educational needs: -				
Need for increasing skills and educational abilities	155	**95.1**	8	4.9
Need for presence of classroom presentation aids and audio-visual aids that helping in more understanding	155	**95.1**	8	4.9
Need for reducing homework according to student's abilities	154	94.5	9	5.5
Need for helping in homework understanding and doing	152	93.3	11	6.7
Mean±SD	**3.71±.55**			
Environmental needs: -				
Need for easy access to school	132	81.0	31	19.0
Need for improving access to buildings and classrooms	149	91.4	14	8.6
Need for providing adequate lighting inside the classroom	150	92.0	13	8.0
Need for providing corridors with bonds that facilitate movement inside the school	149	91.4	14	8.6
Need for sitting in the classroom at the beginning	155	**95.1**	8	4.9
Need for safety of school yard for movement and activities	152	93.3	11	6.7
Mean±SD	**5.84±1.51**			
Total score (Mean±SD) (Range)	**33.73 ±3.06(27-39)**			

Figure (1): Total score of the studied students' needs as reported by them and their parents (n=163).

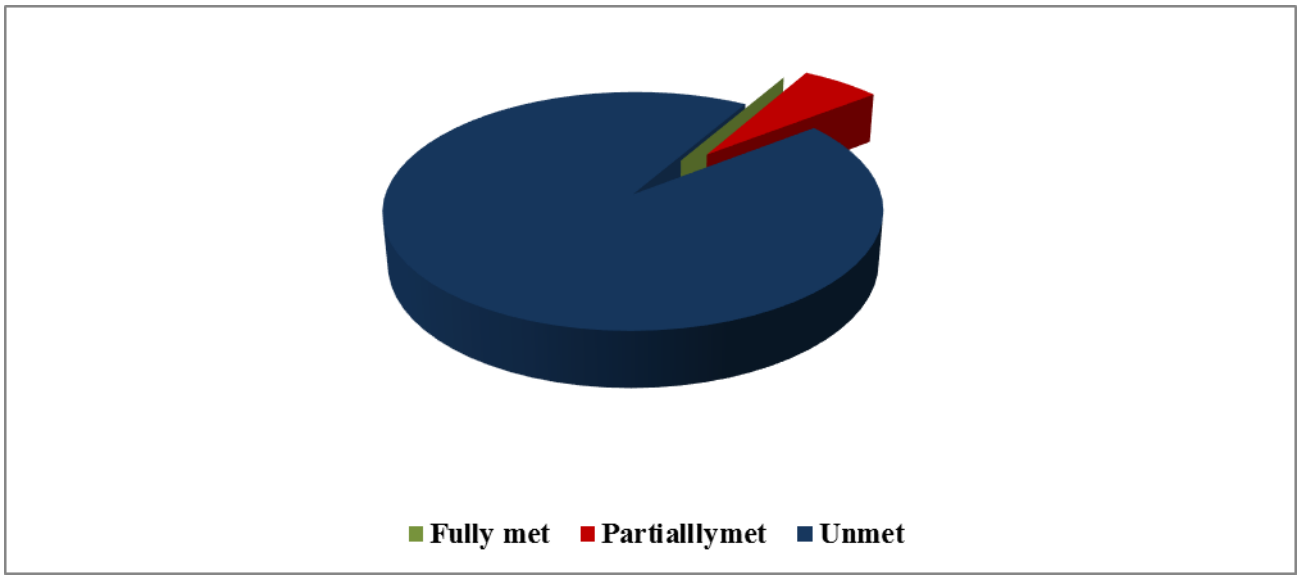


Table (4): Frequency distribution of the studied students according to their daily living, health care and psychological problems as reported by them and their parents (n=163)

Problems	Yes		No	
	N	%	N	%
Daily living problems: -				
Students with disabilities suffering from irregular sleeping hours or short periods of sleep	72	**44.2**	91	55.8
Students with disabilities suffering from nutritional problems such as weight loss or malnutrition	64	39.3	99	60.7
Students with disabilities suffering from mobility Problems	64	39.3	99	60.7
Mean±SD	**1.22±1.02**			
Health care problems: -				
Students with disabilities having many health problems	90	55.2	73	44.8
Students with disabilities not getting a routine medical examination	145	89.0	18	11.0
Students with disabilities not receiving appropriate rehabilitation services for disability	149	**91.4**	14	8.6
Students with disabilities suffering from unavailability of health services provided through school health insurance	140	85.9	23	14.1
Mean±SD	**3.21±.75**			
Psychological / behavioural problems:				
Students with disabilities suffering from constant exposure to abuse	141	86.5	22	13.5

Students with disabilities suffering from constant exposure to violence	142	**87.1**	21	12.9
Students with disabilities involving into many quarrel	136	83.4	27	16.6
Students with disabilities hitting school peers	58	35.6	105	64.4
Students with disabilities wishing ending the life	52	31.9	111	68.1
Students with disabilities suffering from mental illness	126	77.3	37	22.7
Mean±SD	**4.01±1.23**			

Table (5): Frequency distribution of the studied students according to their social educational, and environmental problems as reported by them and their parents (n=163).

Problems	**Yes**		**No**	
	N	**%**	**N**	**%**
Social problems: -				
Students with disabilities suffering from poor social relations	139	85.3	24	14.7
Students with disabilities not participating in school activities	146	**89.6**	17	10.4
Students with disabilities not having any friends	121	74.2	42	25.8
Students with disabilities suffering from harassment and bullying	129	79.1	34	20.9
Students with disabilities suffering from continuous ostracism and social distancing	136	83.4	27	16.6
Students with disabilities not having close friends	131	80.4	32	19.6
Mean±SD	**4.91±.92**			
Educational problems: -				
The academic level of students with disabilities is not good	159	**97.5**	4	2.5
Continuous absenteeism of students with disabilities from school	157	96.3	6	3.7
The fear of students with disabilities from school	144	88.3	19	11.7
Students with disabilities left the school	43	26.4	120	73.6
Mean±SD	**3.08±.65**			
Environmental problems: -				
Students with disabilities suffering from difficulty of reaching the school	111	**68.1**	52	31.9
The school yard is not safe to play in	107	65.6	56	34.4

The floors of the school bathroom are unsafe and slippery	96	58.9	67	41.1
Classrooms are on the upper floors and are difficult to reach	95	58.3	68	41.7
Mean±SD	**2.51±1.83**			
Total score (Mean±SD) (Range)	**18.98±3.19 (13-27)**			

Figure (2): Total score of the studied students' problems as reported by them and their parents (n=163).

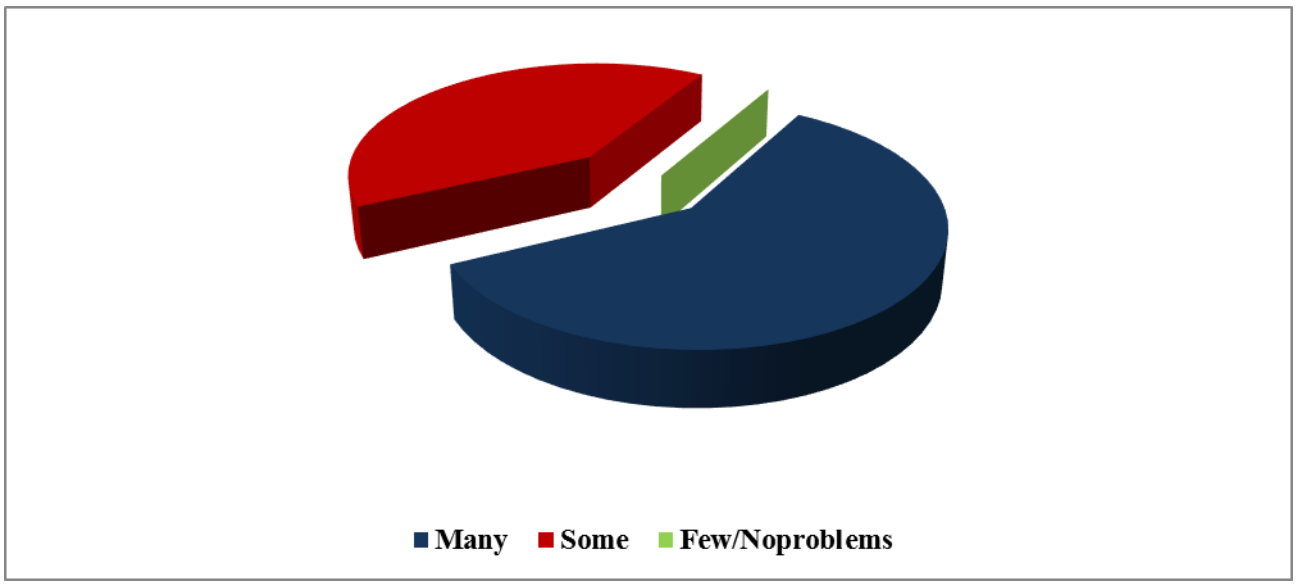


Table (6): Relation between studied student's sociodemographic characteristics and their needs (n=163).

Items	Needs				X^2(P value)
	Unmet		Partially met		
	N	%	N	%	
Age (Years)					
15 years	71	46.4	5	50.0	43.07(<.001*)
16 years	66	43.1	1	10.0	
17 years	12	7.8	0	0	
18 years	1	.7	3	30.0	
20 years	2	1.3	0	0	
21 years	1	.7	1	10.0	
Gender					
Male	93	60.8	8	80.0	1.47(.321)[F]

Female	60	39.2	2	20.0	
Educational level					
1st secondary stage	71	46.4	8	80.0	4.24(**.05***) F
2nd secondary stage	82	53.6	2	20.0	
Birth order					
1st	91	59.5	3	30.0	3.38(.139) MC
2nd	46	30.1	5	50.0	
3rd or more	16	10.5	2	20.0	
Sibling's number					
One	75	49.0	3	30.0	1.50 (.604) MC
Two	60	39.2	5	50.0	
Three or more	18	11.8	2	20.0	
Family income					
Enough	77	99.3	4	40.0	.400(.527) F
Not enough	76	.7	6	60.0	

Table (7): Relation between studied student's sociodemographic characteristics and their problems (n-163).

Items	Problems				X^2(P value)
	Some problems		Many problems		
	N	%	N	%	
Age (Years)					
15 years	35	46.1	41	53.9	6.03(.316) F
16 years	22	32.8	45	67.2	
17 years	4	33.3	8	66.7	
18 years	2	50.0	2	50.0	
20 years	2	100.0	0	0	
21 years	1	50.0	1	50.0	
Gender					
Male	45	44.6	56	55.4	.304(.686) F
Female	21	33.9	41	66.1	
Educational level					
1st secondary stage	39	49.4	40	50.6	**5.01(.027*)** F
2nd secondary stage	27	32.1	57	67.9	
Birth order					

1st	39	41.5	55	58.5	4.07(.151) MC
2nd	21	41.2	30	58.8	
3rd or more	6	33.3	12	66.7	
Sibling's number					
One	28	35.9	50	64.1	3.66 (.170) MC
Two	32	49.2	33	50.8	
Three or more	6	30.0	14	70.0	
No	16	42.1	33	57.9	
Family income					
Enough	33	40.7	48	59.3	.004(1.00) F
Not enough	33	40.2	49	59.8	

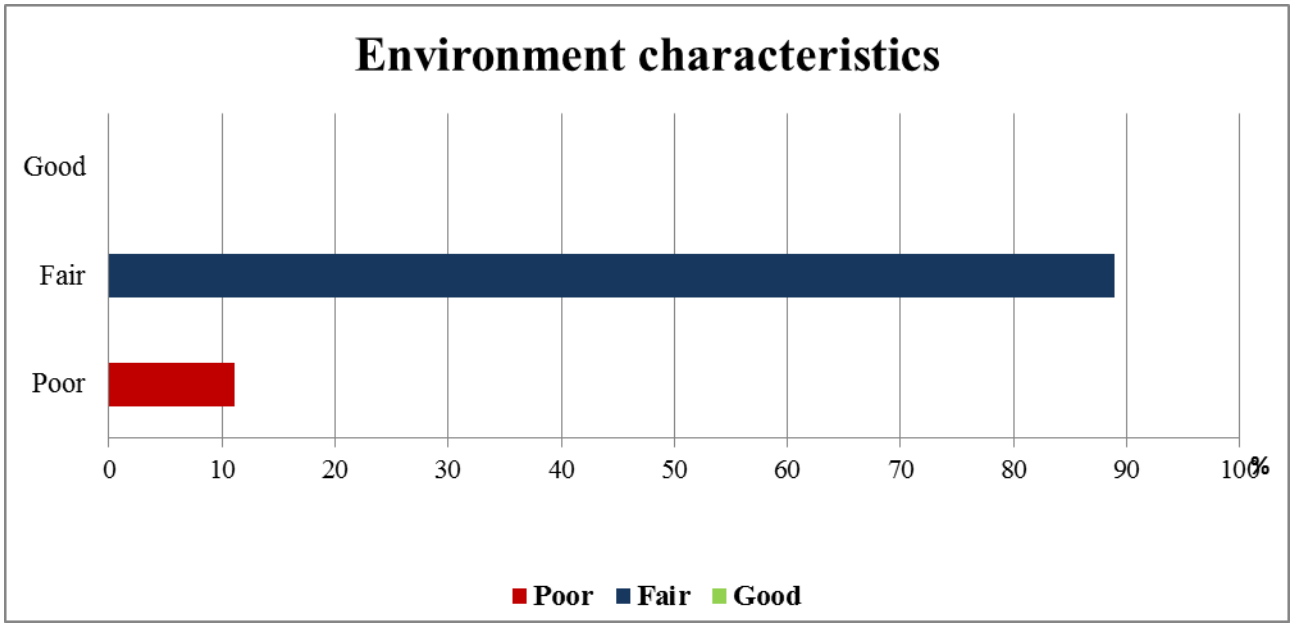
X^2 is chi-square test, **MC** is Monte Carlo for Chi square test P value is significant <.05, F is fisher's exact test.

Table (8): Relation between disability profile and studied students' problems (n=163).

Items	Problems				X^2(P value)
	Some problems		Many problems		
	N	%	N	%	
Type of disability					
Physical	4	40.0	6	60.0	**14.00(.026*) F**
Auditory	9	50.0	9	50.0	
Visual	6	40.0	9	60.0	
Intellectual	13	31.7	28	68.3	
Learning difficulties	24	38.1	39	61.9	
Attention deficit hyperactivity disorder (ADHD)	0	0	4	100	
Autism	10	83.3	2	16.7	
IQ level					
55-<70	22	36.7	38	63.3	.576(.510) F
70-84	44	42.7	59	57.3	
Current rehabilitative services					
Yes	58	43.0	77	57.0	1.99(.840) F
No	8	28.6	20	71.4	
Causes of disability					
Prenatal Causes	5	50.0	5	50.0	3.48 (.488) MC
Natal causes	11	57.9	8	42.1	
Postnatal causes	14	40.0	21	60.0	
Idiopathic	35	36.5	61	63.5	
Others* Accident	1	33.3	2	66.7	

X^2 is chi-square test, ^{MC} is Monte Carlo for Chi square test P value is significant <.05, F is fisher's exact test.

Figure (3): School physical environment characteristics of the observed schools



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