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Effect of Health Educational Program for Females Blinded Adolescents Students regarding Reproductive Health

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Abstract

Aim of this study: This study was aimed to assess effect of audio teaching programme on blind girls about reproductive health knowledge & attitude. Design: A quasi-experimental design was applied to achieve the aim of the study. Setting: The study was carried out in El-Nor and El-Aml School in Cairo City(Mustafa Asaker), Elfayoum City& Benisuef City. Sample **:**purposive sample included 60(6%) blind girl were found in El-Nor and El-Aml school, staying and not staying at school. Criteria: Aged 12-19 years, blind girls**,** attained menarche**,** unmarried & able to communicate. Tool: Data was collected through An interviewing questionnaire which include three parts 1) socio-demographic characteristics of the girl 2) assess their knowledge about reproductive health. 3) Likert rating scale to assess attitude regard reproductive health. Results: after applying the audio teaching program the study shows high significant improvement in blind girl's knowledge and attitude regarding reproductive health post program with highly statistically differences ($P<0.001$). Conclusion: According to the finding and research hypothesis, the blind girl's in El-Nor and El-Aml schools their knowledge & Attitude were upgrading after implementation of the audio teaching program about reproductive health. Recommendations: The study recommended that continuous health educational program should be provided to adolescents blinded students& their teacher's about reproductive health & findings emphasize that information about reproductive health should be included in the school curriculum, and that there should be better communication between female students and their teachers, and between daughters and mothers.

Key words: Adolescent, Reproductive Health, Blind girl, knowledge, attitude.

Introduction

Adolescence is a critical period in girls' lives as they transition from childhood to the responsibilities of adulthood. With a better understanding of their bodies and of their own physical and psychological changes, young people can go through puberty more confidently. Comprehensive sexuality education helps empower young people to protect their health and well-being as they grow and take on family responsibilities.***(Wahba& Fahimi., 2012)***.

Blindness is devastating physical condition with deep emotional and

economic implications. The blindness causes major changes in lifestyle, habits of blind female which may result in problems in physical, psychological and social adjustments ***(Mc ConachieH & Moore .,2011)***

It has a serious effect on the female adolescent students, family and community. As it considered the most traumatic sensory impairment where vision is one of the most important channels through which the adolescent is informed about environment and it is vital in coordinating experiences.***(Christie & Viner ., 2012)***

According to ***(WHO.,2012)*** estimation the percentage of vision impairment were 148 million worldwide would be blind, and 110 million cases of low vision that would be at risk of becoming blind reported. Approximately 90% of the world visually impaired people live in the developing countries; this means that 9 out of 10 who are visually impaired live in the developing country as well.

Reproductive health is a state of complete physical, mental and social well-being in all matters related to the reproductive system, it means that all people should have a satisfying and safe sexual life. Disabled people should allowed to reproduce while maintaining the freedom to decide when and how often to do so. This requires that sexual health be included in the entire health package to enhance the personal lives seeking early intervention (Population, Reproductive Rights and Reproductive Health***)(* Scott *& etal.,2011).***

In Egypt, adolescents receive very limited SRH (Sexual Reproductive Health) education through the formal school system. Both national and sub national surveys have shown that young Egyptians lack basic information on SRH topics and often receive information from sources that may be misleading or inaccurate. Surveys also have shown that both young people and their parents would like more information on these topics to be taught at school (***(Wahba & Fahimi., 2012)***

The nurse can advocate for blind female students, improving their needs by designing programs to promote their healthy life style or even jointing in teaching classes focusing on the targeted areas of nutrition, physical activity, stress management, family planning, injury prevention and health protection from hazards such as smoking, substance abuse and dangers of spread of sexually transmitted diseases. ***(Wong's & etal., 2012)***

Significance of the study

Many adolescents die prematurely every year, an estimated 1.7million young men and women between ages of 10and 19 lose their lives to accident , violence, pregnancy related complications and other illnesses that are preventable or treatable As a result, adolescent reproductive health (RH) is an increasingly important component of global health. ***(May Tawfik,2011)***

Focusing on adolescent RH is both a challenge and opportunity for health care providers .While adolescence generally is a healthy period of life , many adolescents are less informed , less experience , and less comfortable .adolescent often lack basic RH information knowledge and access to affordable confidential health services for RH .Many don't feel comfortable in discussing RH with parents other key adults. (***Parwej& etal ,2005)***

Knowledge about reproductive health is important for healthy sexual behavior of adolescents. This includes

knowledge on risks of teenage pregnancy, sexually transmitted diseases (STDs), HIV and AIDS, freedom from risk of sexual diseases; right to regulate one's own fertility and full knowledge of contraceptive choices. School education programs have been proved to be an effective means of improving knowledge and leading to healthy sexual behavior among adolescents ***(Dhital.etal,2005)***

Aim of the study

Assess effect of health educational program for females blinded adolescents students regarding reproductive health.

Research question:

What are the effect of audio teaching programme on blind girls about reproductive health knowledge and attitude?

Research design:

A quasi-experimental design was applied to achieve the aim of the study.

Setting:

The study was conducted in El- Nor and El- Aml school in Cairo(Mustafa Asaker), Elfayoum & Benisuef city

Sample:

A purposive sample was used in the study.

Size:

All sixteen blind girl were found at El-Nor and El-Aml school **(** Cairo City(Mustafa Asaker) 24 blind girl , Elfayoum City 13 blind girl & Benisuef City 23 blind girl**)**

Criteria:

The study was conducted based on the following criteria regarding the selection of samples.

Inclusion criteria :blind girls**,** age group of 12-19yrs **,**attained menarche**,** unmarried **&** able to communicate

Exclusion criteria

with hearing impairment

Tools of data collection

An Structured interviewing questionnaire

It was developed by the researcher based on review of literature. It constructed to assess their socio demographic data, knowledge and their attitude regarding RH. The questionnaire constituted of 55 open and close end questions. It consisted of 3 parts as follows: it was included the following:

- **Socio demographic data:** For blind girl it included data about age, educational status, residence, type of blindness, educational level & occupation of parent
- **Blind girls knowledge (pre-post teaching programme):** regarding reproductive health such as puberty , menstruation and personal hygiene, reproductive health, genital tract infection ,family planning
- **Scoring system**

It was divided into general and specific assessment knowledge, (optimal score 100 point).Total blind girl general and specific knowledge was classified into the following scale ,complete

knowledge up to 76% , incomplete knowledge 51% to 75%, while incorrect knowledge less than 50%.

❖ **Blind girls attitude (pre-post:** Through Likert scale to assess blind girl's attitude regarding reproductive health . Each item was evaluated as agree , disagree , and uncertain . It is consisted of 20 statements .

❖ **Scoring system:**

- **Agree** response given score **2** points
- **Uncertain** response given score **1** point
- **Disagree** response scored zero

Total blind girls attitude: Through asking question: The attitude has been scored as always =2 score, sometimes = 1 score and rarely =0. It was classified into the following scale Agree : >75%, Uncertain 50% and more, while Disagree <50%.

❖ **Arabic booklet** of supportive material was used Braille method including : information about puberty , menstruation and personal hygiene, reproductive health, genital tract infection ,family planning.

Ethical Consideration

-The research approval was beging obtained from scientific research ethical committee in faculty of nursing at Ain Shams University before starting the study.

-The researcher clarified the objective and aim of the study to the students who were included in the study.

-The study didn't cause any harmful for any persons during data collection.

-Maintaining anonymity and confidentiality of the subject data.

-The students informed that they were allowed to choose to participate or not in the study.

-Date collection , for research only.

Operational design

The study completed and has passed through different phases as follows: The preparatory phase, pilot study phase, and lastly the field work phase.

Pilot Study

A pilot study was carried out on 6 (10%) blind girl's . The aim of the pilot study was to test clarity, simplicity and applicability of the study tools. According to the results of the pilot, necessary modifications were carried out and the tools finalized

Field work

- For work organization, the researcher allocated 3 days each week (Sunday, Thursday and Tuesday), attended in Alnor & Alamal school from 3.00p.m.to 3.45 p.m **(group A)** while **(group B)** from 4.00p.m. to 4.45 p.m

- **Sunday** for El- Nor and El- Aml school in Cairo City (Mustafa Asaker) 24 blind girl divided into two group(group **A** average age 12-15 years - number of blind girls 14)(group **B** average age16-19 years - number of blind girls 10)

- **Thursday** at El- Nor and El-Aml school in Elfayoum City 13 blind girl divided into two group(group **A** average age 12-15 years - number of blind girls 8)(group **B** average age16-19 years - number of blind girls 5)

- **Tuesday** at El- Nor and El- Aml school in Benisuef City 23 blind girl divided into two group(group **A** average age 12-15 years - number of blind girls 9) (group **B** average age16-19 years - number of blind girls 14)

- The duration of each session was ranged from 45 minutes to 60 minutes)

- Actual field work was carried out in the period from October 2014 up to A brail 2015

- The blind girl were interviewed in El- Nor and El- Aml school and the aims of the study were explained.

- The assessment phase (pretest) was done for 60 blind girl; it lasted 1.5month to be fulfilled.

- The implementation phase of the program lasted for 4 months to be accomplished.

- Post test were done after of program implementation phase at lasted for 1.5 months to be accomplished.

- Teaching sessions were conducted in a reception of El- Nor and El- Aml school and in class

- The average time consumed to fill tools was 45 minutes. Informed consent was secured before collecting data.

Program construction: This program was conducted on four consecutive phases, assessment, developing, implementing and evaluating.

preparatory phase: a review of recent, current, national and international related literature in various aspects of the problems to design the study tools and to be acquainted with various aspects of the problem then assessment done to determine the blind girl's needs by using pretest based on the collecting data of blind girls knowledge and their attitude

Second phase: planning and the implementation of audio teaching programme to improve blind girls knowledge and attitude regarding reproductive health

The general objective of the program: improve blind girls knowledge and attitude regarding reproductive health by using an audio teaching program.

Sessions:

- The program was implemented over a period of 7 months; it carried out in 16 sessions The duration of each session was ranged from 45 minutes to 60 minutes. Attended in El- Nor and El- Aml school from 3.00p.m.to 3.45 p.m **(group A)** while **(group B)** from 4.00p.m. to 4.45 p.m.

- The actual works started by meeting the blind girl in El- Nor and El- Aml school, first, the researcher introduce her to blind girl and give them a brief idea about the study and its aim.

- The program was conducted in El- Nor and El- Aml school, and the health education sessions conducted in class.

- At the beginning of the first session, an orientation about the program and its purposes, and the blind girl were informed about the time.

- Each session started by a summary about what was given through the previous sessions and objectives of the new one, taking into consideration using simple and clear language to all level of blind girl

- Different methods were used such as, lectures. Using effective media of conveying information as A booklet was developed for blind girl as a reference after program implementation. Post-tests were conducted at the end of the program.

The program content included:

- **The theoretical parts include:**

- Anatomy and physiology female reproductive system & breast.

- Basic element of reproductive health

- Improvement reproductive health

Finally, the evaluation phase: this phase evaluate the effect of audio teaching programme on blind girls about reproductive health knowledge & attitude. through post tests by used the same tool

Administrative Design:

An official letter clarifying the title , and purpose , and proposed setting of the study was obtained from the dean of the faculty of nursing , Ain shams university. It was addressed to the director of Mustafa Asaker Cairo School, the director of El-Nor and El-Aml Elfayoum School. & the director of El-Nor and El-Aml Benisuef School.

Statistical design

Data were revised, coded, analyzed and tabulated using the number and percentage distribution and carried out in the computer. The following statistical techniques were used: Percentages, mean value, standard Deviation, chi-square (X2), proportion probability (p-value) and r.

Results:

Table (1) describes the socio-demographic characteristics of the studied blind girl's as regards their age group, residence Educational stage, education level and occupation father& mother. The table shows that the largest age group in the study was the age between 12 -14 years old (36.6%) and more than half of them (65.0%) residents of rural areas. The majority of them(60.0%) were preparatory. The illiterate mother represent (53.3%) while (6.7%) had Technical degrees. Almost of them (81.7%) were Housewife.

Table (2) shows the girls differential knowledge about puberty before the program are found incorrect knowledge 100% reproductive system while the place opened urine for genitals 63.3% and 60% thin membrane. After the program, we see a noticeable increase correct knowledge in the reproductive system at rates 76.7% and 98.3% in each of the place opened and urine thin membrane.

Figure (1): Shows blind girl's differential total knowledge about puberty before audio teaching programme; it shows that blind girl's(45.0%)scored incorrect; (41.7%)scored incomplete, while (13.3%) scored complete from the total sample. After the program ;we see a noticeable increase complete & correct knowledge about puberty to reach (95.0%) from the total sample.

Table (3): shows the girls differential knowledge about menstruation and personal hygiene before the program are found incorrect knowledge 43.3% in each of the correct way to clean the genitals and Frequency of use of sanitary napkins while incomplete knowledge 78.3% Menstrual cycle. After the programe , we see a noticeable increase correct knowledge 100 % correct way to clean, 98.3%

Frequency of use of sanitary napkins and 96.7% Menstrual cycle

Figure (2): Shows blind girl's differential total knowledge about menstruation before audio teaching programme; it shows that blind girl's(15.0%)scored incorrect; (23.3%)scored incomplete, while (61.7%) scored complete from the total sample. After the program ;we see a noticeable increase complete & correct knowledge about menstruation to reach (96.7%) from the total sample

Table (4): shows the girls differential knowledge about reproductive health before the program are found incorrect knowledge 100% in each of the reproductive health , basic elements, breast self-examination , when ,how to be testing and complications of circumcision , 83.3% tests before marriage, 96.7% masturbation and harmful while incomplete knowledge 61.7% safe pregnancy .After the program , we see a noticeable increase correct knowledge 75% basic elements of reproductive health, 91.7% of the breast self-examination, 81.7% tests before marriage & masturbation, 73.3% complications of circumcision while incomplete knowledge 66.7% reproductive health

Figure (3): Shows blind girl's differential total knowledge about reproductive health before audio teaching programme; it shows that a majority of blind girl's (96.7%) scored incorrect knowledge from the total sample. After the program; we see a noticeable increase complete & correct knowledge about reproductive health to reach (93.3%) from the total sample**.**

Figure (4): Shows source of knowledge related to reproductive health among blind girl's in study sample **it** was found that 73.3% of blind girl's had their knowledge from mother , (46.7 %) had their knowledge from friend while (30.0%) had their knowledge from school .

Figure (5): Shows the girls differential total knowledge before program it was found 85% incorrect knowledge while after the program , we see a noticeable increase correct knowledge to reach 83.3% from the total sample.

Figure (6): Shows the girl's differential total attitude before audio teaching Programme; it shows that a majority of blind girl's (90.0%) scored negative attitude; (6.7%) scored neutral while (3.3%) positive attitude from the total sample. Shows the girl's differential total attitude after audio teaching programme; it shows that blind girl's(3.3%) scored negative attitude; (10.0%) scored neutral while (86.7%) scored positive attitude from the total sample.

Table (1): Differential General Characteristics of the Study Group.

Items		(n=60)	
		No	%
Age(year)	12-14	22	36.6%
	>14-16	15	25%
	>16-18	19	31.7%
	>18	4	6.7%
Place of residence	Urban	21	35.0%
	Rural	39	65.0%
Educational stage	Preparatory	36	60.0%
	Secondary	24	40.0%
Educational level of the mother:	Illiterate	32	53.3%
	Basic	5	8.3 %
	High	19	31.7%
	Technical	4	6.7 %
Mother job	Housewife	49	81.7%
	Governmental Job	9	15.0%
	Private Job	2	3.3%
Educational level of the father	Illiterate	21	35.0%
	Essential	8	13.3%
	High	23	38.3%
	Technical	8	13.3%
Father job	Jobless	2	3.3%
	Governmental Job	23	38.3%
	Private Job	35	58.3%

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Table (2) : Differential According to Blind Girl's Knowledge About Puberty Before & After Audio Teaching Programme

Aspect of knowledge	Before intervention (n=60)						After intervention (n=60)					
	Incorrect		Incomplete		Complete & correct		Incorrect		Incomplete		Complete & correct	
	No	%	No	%	No	%	No	%	No	%	No	%
Age of puberty	20	33.3%	0	0.0%	40	66.7%	0	0.0%	0	0.0%	60	100.0%
Changes in adulthood	13	21.7%	13	21.7%	34	56.7%	0	0.0%	0	0.0%	60	100.0%
Anatomy of female reproductive system	60	100.0%	0	0.0%	0	0.0%	0	0.0%	14	23.3%	46	76.7%
Organ that grows inside the fetus for 9 months	18	30.0%	0	0.0%	42	70.0%	1	1.7%	0	0.0%	59	98.3%
Place opened urine for external genitals	38	63.3%	0	0.0%	22	36.7%	1	1.7%	0	0.0%	59	98.3%
Thin membrane, which is located inside the vaginal opening and has multiple forms	36	60.0%	0	0.0%	24	40.0%	0	0.0%	0	0.0%	60	100.0%
From your point of view is preferable to the girl genital cleaned every time after urinating	4	6.7%	0	0.0%	56	93.3%	0	0.0%	0	0.0%	60	100.0%

Table (2): shows the girls differential knowledge about puberty before the program are found incorrect knowledge 100% reproductive system while the place opened urine for genitals 63.3% and 60% thin membrane. After the program, we see a noticeable increase correct knowledge in the reproductive system at rates 76.7% and 98.3% in each of the place opened and urine thin membrane

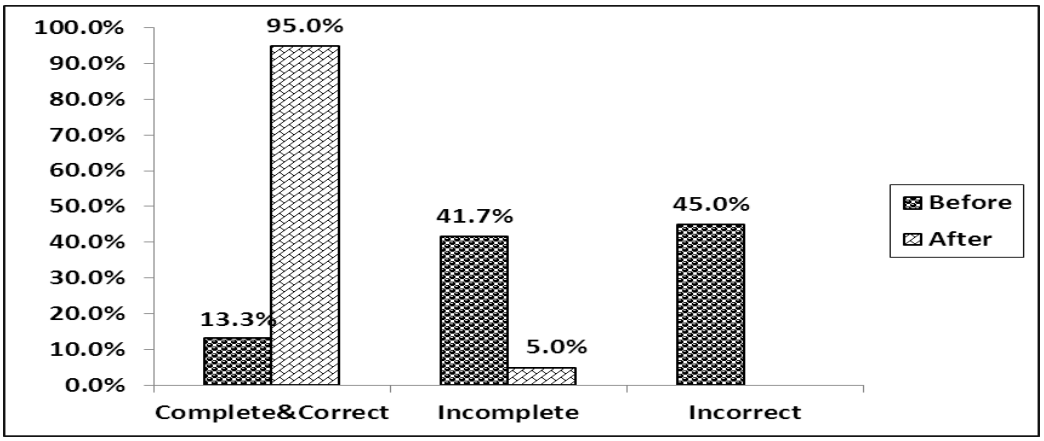

Figure (1): Differential According to Blind Girl's Total Knowledge about Puberty before & After Audio Teaching Programme.

Figure (1) : Shows blind girl's differential total knowledge about puberty before audio teaching programme; it shows that blind girl's(45.0%)scored incorrect; (41.7%)scored incomplete, while (13.3%) scored complete from the total sample. After the program ;we see a noticeable increase complete & correct knowledge about puberty to reach (95.0%) from the total sample.

Table (3): Differential According to Blind Girl's Knowledge About Menstruation and Personal Hygiene Before & After Audio Teaching Programme

Aspect of knowledge	Before intervention						After intervention					
	Incorrect		Incomplete		Complete & correct		Incorrect		Incomplete		Complete and correct	
	(n=60)						(n=60)					
	No	%	No	%	No	%	No	%	No	%	No	%
Menstrual cycle	8	13.3%	47	78.3%	5	8.3%	0	0.0%	2	3.3%	58	96.7%
Average age of the beginning of menstrual cycle	13	21.7%	0	0.0%	47	78.3%	0	0.0%	2	3.3%	58	96.7%
Number of periods per month	4	6.7%	0	0.0%	56	93.3%	0	0.0%	0	0.0%	60	100.0%
Correct way to clean the genitals	26	43.3%	0	0.0%	34	56.7%	0	0.0%	0	0.0%	60	100.0%
Sanitary napkins is the ideal way for period hygiene	7	11.7%	0	0.0%	53	88.3%	0	0.0%	2	3.3%	58	96.7%
Frequency of use of sanitary napkins	26	43.3%	0	0.0%	34	56.7%	0	0.0%	1	1.7%	59	98.3%
Items of personal hygiene during the period	3	5.0%	20	33.3%	37	61.7%	0	0.0%	1	1.7%	59	98.3%

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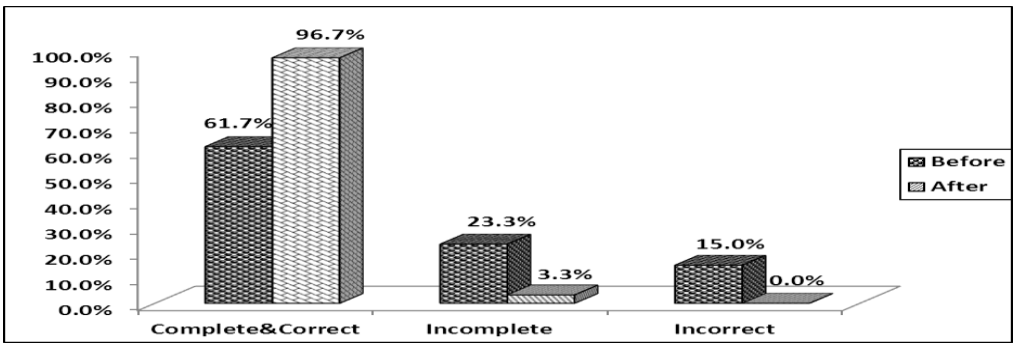

Figure (2): Differential According to Blind Girl's Total Knowledge about Menstruation and Personal Hygiene before & After Audio Teaching Programme.

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Table (4): Differential According to Blind Girl's Knowledge About Reproductive Health Before & After Audio Teaching Programme.

Aspect of knowledge	Before intervention (n=60)						After intervention (n=60)					
	Incorrect		Incomplete		Complete & correct		Incorrect		Incomplete		Complete and correct	
	No	%	No	%	No	%	No	%	No	%	No	%
Reproductive health	60	100.0%	0	0.0%	0	0.0%	0	0.0%	40	66.7%	20	33.3%
Basic elements of reproductive health	60	100.0%	0	0.0%	0	0.0%	0	0.0%	15	25.0%	45	75.0%
Scope of the safe pregnancy	15	25.0%	37	61.7%	8	13.3%	0	0.0%	5	8.3%	55	91.7%
Ideal place for the birth of a child	2	3.3%	0	0.0%	58	96.7%	0	0.0%	0	0.0%	60	100.0%
Meaning of self-examination of the breast	60	100.0%	0	0.0%	0	0.0%	0	0.0%	5	8.3%	55	91.7%
Time is Breast self-examination	60	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	60	100.0%
Doing a self-examination of the breast	60	100.0%	0	0.0%	0	0.0%	0	0.0%	5	8.3%	55	91.7%
Tests before marriage	50	83.3%	8	13.3%	2	3.3%	0	0.0%	11	18.3%	49	81.7%
Girls circumcision useful	48	80.0%	0	0.0%	12	20.0%	0	0.0%	0	0.0%	60	100.0%
Complications of circumcision	60	100.0%	0	0.0%	0	0.0%	0	0.0%	16	26.7%	44	73.3%
Masturbation	58	96.7%	2	3.3%	0	0.0%	0	0.0%	11	18.3%	49	81.7%
Masturbation harmful	58	96.7%	0	0.0%	2	3.3%	0	0.0%	0	0.0%	60	100.0%
Proper nutrition for the body	17	28.3%	36	60.0%	7	11.7%	0	0.0%	2	3.3%	58	96.7%
Proper nutrition positive influence "on reproductive health"	6	10.0%	0	0.0%	54	90.0%	0	0.0%	0	0.0%	60	100.0%

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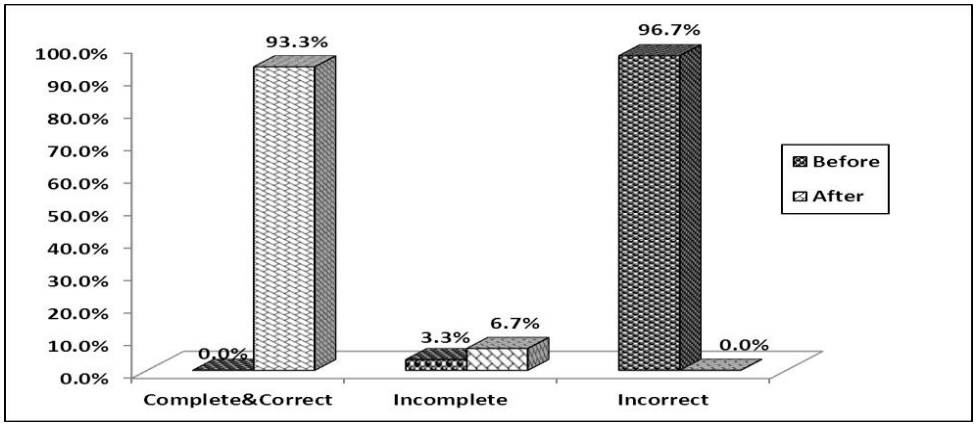


Figure (3): Differential According to Blind Girl's Total Knowledge about Reproductive Health before & After Audio Teaching Programme.

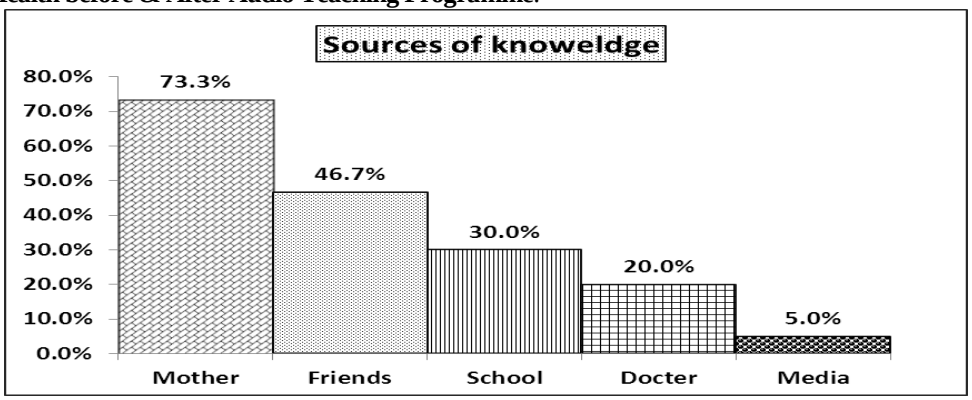
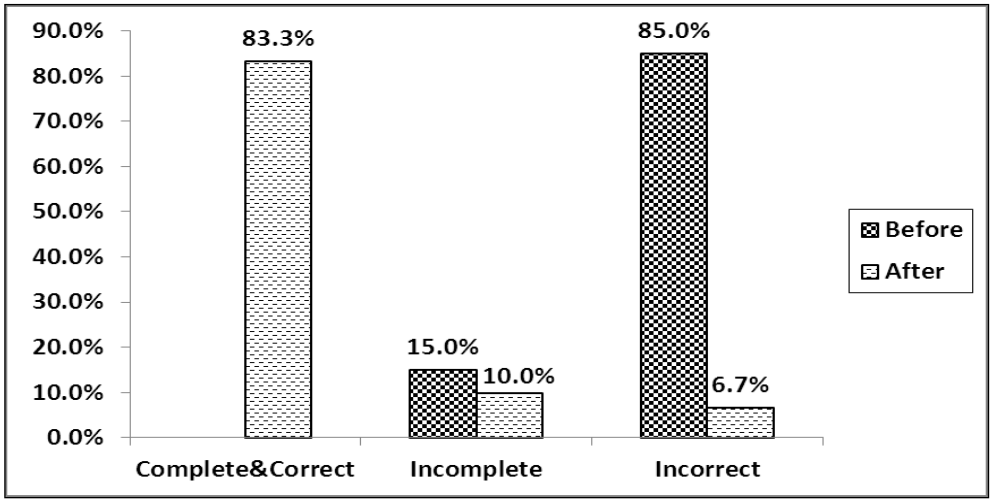


Figure (4): Sources of Knowledge Before Programme Related to Reproductive Health Among Blind Girl's in Study Sample.



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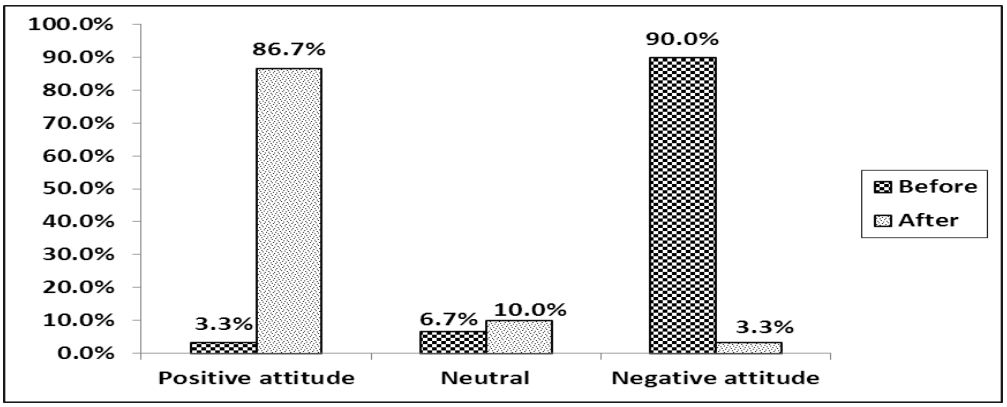

Figure (6): Differential According to Blind Girl's Total Attitudes before & After Audio Teaching Programme.

Discussion:

Blindness female adolescent students are obviously disadvantaged as it is hard for them to achieve normal levels of social, emotional and cognitive development. They experience many losses such as self-esteem, physical integrity, mobility, daily living activities, recreation, career, and personal independence as well as social adequacy ***(Ramadan, 2011)***

According to students' demographic characteristics; the current study showed that the majority residence students two thirds living in rural area; regarding mother education the minority were completed university education, while more than half of them were housewives. These results in line with (***Killer,2009***),who revealed that highest prevalence of parents of female blindness were found among low educational and only fifth of them completed their university education due to low socio-economic standards of their families

These results are in agreement with the results of a study [***Montgomery & Morris, 2011***] , reported that the majority of student's mothers were housewives and nearly half of them of students' mothers were illiterate in relation to needs for career the current study revealed that around two thirds of students needs helper (career) to perform certain tasks. This lead to that blind girl have incorrect knowledge regard reproductive health.

According to the students' knowledge the current study revealed that the majority of students had incorrect knowledge regarding reproductive health pre intervention while high level of knowledge post intervention. The results of the present study are in agreement with those **(Yohannes et al.,2013**) mentioned that knowledge of students about reproductive and sexual rights was found to be low. the majority of the young people have very little knowledge of what sexual rights they are entitled to. Sometimes, they do not even appreciate the extent of their violations, and what is worse still, they do not know where they could go for legal or social advice**.** This lead to that blind girl have incorrect knowledge regard reproductive health

On the other hand these results supported by another study **(Mounir et al.,2003)** reported that adolescents don't have enough and/or correct knowledge regarding reproductive health .The low knowledge level was more evident regarding the questions about the meaning of the term 'reproductive health' ,the benefits of premarital examination, the investigations

done for the pregnant woman, the benefits of breast feeding, methods of family planning, side effects of female genital mutilation, sexually transmitted diseases and methods of protection .Due to less teaching programe about reproductive health to blind girls in the El- Nor and El- Aml school.

The present study show that more than half of the students had complete &correct knowledge regarding menstrual hygiene while high level of knowledge post intervention .The results of the present study are agreement with those (***Teklemariam et al.,2014)*** reported that the majority of the high school students respondents had good knowledge about menstrual hygiene management. This might be attributed to the time gap that accessibility, availability and ability to optimally utilize reproductive health information may be improved as time increases.

According to source of students' information the current study revealed that more than two third source of students' information from mother play a prominent role in the dissemination of reproductive health information including puberty, sexual transmitted diseases, family planning, menstruation and menstrual hygiene. The knowledge level of reproductive health appears to be increasing with an increase in friends , school .doctor and in time spent on listening TV/listening to radio Thus the finding of this study showed that the availability of mother &friend as the highest predictor of good knowledge of reproductive health. The results of the present study agree with the results of a study ***[Wahba & Fahimi, 2012]*** who reported that media have a profound impact on young people's knowledge, beliefs, and attitudes related to reproductive health. And three out of five female respondents considered their mothers as their main source of information about puberty. This may be explained that female blinded adolescents students, had closed social relation only with friends in institute, their families, teachers, and media. This lead to that blind girl have correct knowledge regard menstruation and personal hygiene but increase incorrect knowledge regarding reproductive health ,puberty, STD & family planning services .

Accordingly these results disagreed with the finding of the study (**Shivaleela et al.,2015)** reported that the majority of the girls high school had got knowledge &practice from mass media so play a prominent role in the dissemination of reproductive health information including menstruation and menstrual hygiene appears to be increasing with an increase in time spent on watching TV/listening to radio. Thus the finding of this study showed that the availability of mass media (Radio/ TV) at home as the highest predictor of good knowledge of menstrual hygiene. In fact, the reason might be mass media may be endorsed to the effect of technology on increasing knowledge and gaining needed information about menstrual hygiene

The present study discovered that majority of students incorrect knowledge regarding meaning of female genital mutilation &complication .Believed that FGM is good Pre-intervention. While majority of the students now understood full meaning of FGM and knew the complications .Were against the practice. The stigmatizing attitudes held against uncircumcised women decreased post-intervention . The results of the present study agree with the results of a study **(Rasmia & Ebtisam ,2015)** who reported that Pre-intervention low knowledge of the adolescence girls on the true meaning of FGM . believed that FGM is good and should be continued based mainly on culture and tradition. Respondents displayed a high negative and stigmatizing attitude toward the uncircumcised women they are promiscuous , shameful& would not recommend them for marriage .Post-intervention the students s now understood full meaning of FGM and knew the complications. While were against the practice. The stigmatizing attitudes held against uncircumcised women decreased significantly from baseline to post-

intervention . This lead to that blind girl persistence of female genital mutilation and expose to dangerous complication

The present study observed that majority of students can't tell about right to discuss sex reproductive health to parent. These results agreed with the finding of the study **(Olumide et al .,2014)** which mentioned that students were universally Cultural taboos, being ashamed and lack of communication skill of adolescent makes them not to discuss openly with their parent about sexual and reproductive health issue which is similar other studies. This is due to the fact that sexual conversations are deemed a taboo subject in many African communities.

According to the students' knowledge the current study revealed that statistically significant relations between total knowledge score regarding reproductive health pre and post implementing the program among blinded adolescent students in El-Nor and El-Aml school. This may be due to the trials of blind female adolescent students to divert their attention from their disabilities and gain their attention related to education, physical health and increasing their self-esteem. These results in accordance with ***[Wahba & Fahimi, 2012]*** they reported that in Egypt, young people receive very limited reproductive health education through the formal school system. Both national and sub national surveys have shown that young Egyptians lack basic information on reproductive health topics and often receive information from sources that may be misleading or inaccurate. Surveys also have shown that both young people and their parents would like more information on these topics to be taught at school.

Conclusion

Based on results of the current study, and the research hypothesis the following can be concluded:

Adolescents blind girl's in El-Nor and El-Aml schools their knowledge &Attitude were upgrading after implementation of the audio teaching program about reproductive health.

Recommendations

Based on the results of the present study, and research hypothesis, it is recommended to:

- Continuous health educational program should be provided to adolescents blinded students about reproductive health
- Findings emphasize that information about reproductive health should be included in the school curriculum, and that there should be better communication between female students and their teachers, and between daughters and mothers

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