

Efficacy of Educational Caring Program on the Nurses' Attitude and Perception of Caring Behavior toward Patients with Substance Use Disorder

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Abstract Nurses are the forefront health care members working in close proximity to substance use disorder (SUD) patients. They remain the most important persons in providing caring for these patients and they play the pivotal caregiving role for them. To do this important role, nurses need to have good knowledge, positive attitude and caring behaviors toward those patients. **Aim of the study:** This study was aimed to evaluate the effect of educational caring program on the nurses' attitude and their perception of caring behavior toward patients with substance use disorder. **Subjects of study:** sample consisted of 50 nurses who were chosen by convenient sampling. **A quasi-experimental design** was utilized. **Setting of the study:** - The study was conducted at Shopra kas center for addiction, the center is affiliated to the General Secretariat of Mental Health. **Tools of the study:** Two tools were used for data collection; Substance Abuse Attitudes Survey (SAAS) designed to measure nurses' attitudes towards substance use disorder and Caring Behavior Assessment Tool (CBA) aimed to assess nurse' perception regarding caring behavior toward substance use disorder patients. **Result of the study:** The results revealed that there was statistically significant improvement in the studied nurses' attitude and perception of caring behavior regarding substance use disorder patients after implementation of educational caring program. **Conclusion and recommendation:** The study concluded educational caring program was enhancing the studied the nurses' attitude and their perception of caring behavior toward substance use disorder patients. According to these results, up-to-date in-service training programs on regular basis for nurses' dealing with SUD patients about attitude and caring behavior skills is recommended.

Keywords: nursing attitude, nursing perception, caring behavior, substance use disorder

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1. Introduction

Substance use disorder (SUD) is one of the most social, mental, legal, and public- health challenges in the world. It is the major burden in the 21st century that impacts families and society on multiple levels directly or indirectly. SUD is a chronic pattern of behavior that is characterized by the repeated use of substances despite significant ongoing harms associated with using and it is difficult to control or cease the use of substances due to physical or psychological dependence. [1,2]

Substance use disorder accounts for 33.4% of the burden of disease and 12.4% of all death globally and it was cited as constituting the third highest risk factor to health in the developed world. [3,4] At the national level, the Ministry of Health (2015) stated the percentage of

substance use disorder patients in Egypt reached 6% from the total population and the percentage of substance users in Al-Gharbia government reached to 9,6% from the total population of government [5,6]. Given the high prevalence of substance use disorder, attention of providing health care for those patients is becoming imperative request.

Health-care professionals' attitudes particularly nurses toward persons with substance use disorder (SUD) is vitally important operator in providing care for those patients. The term attitude refers to an individual's mental status which is based on his/her beliefs or value system, emotion, and tendency to act in certain situations and one's attitude reflects how one thinks, feels, and behaves in a given situation. [6,7] Previous studies have indicated that health-care professionals in general hold a negative view of patients with SUD, which affect their approach to providing care for those patients and can contribute to suboptimal care. Furthermore, there is evidence to suggest that nurses have

a more negative attitude than other health-care professionals toward persons with substance use disorder [5,7].

Nurses have a key role for the improvement of quality of care as they are the ones who have the most contact and time with the patients. However along review of literatures on nurses' attitude revealed many nurses across recent three decades have negative attitude toward patients with substance use disorder and described a variety of nurses' attitudes and feeling toward those patients including intolerance, discrimination, anger, distrust, powerlessness, anxiety, frustration and disappointment related to patient's relapse and recidivism. [7,8] In fact these negative attitudes of the nurse often lead to poor quality of nursing care with consequent harm to the patient. Moreover when persons with SUD are approached by nurses with disdain and rejection, no matter how subtly, they may reject the care offered by nurses [9,10].

On other hand, nurse who has positive attitude toward substance use disorder patients have an optimistic approach toward patients and see them like any other patients without any stigmatization, therefore nurse whose positive attitude works with those patients effectively, establishes sense of rapport and professional nurse patients relationship resulting in the patients feel trust, seek treatment and engage in treatment program without any feeling with stigmatization. [3,8,11] Accordingly Monks and colleagues (2017) stated a positive attitude on the part of nurse is the best approach when working with persons with SUD. [12]. Consequently we are in front of important fact that negative attitude of nurses toward SUD persons perpetuates suboptimal patient care and as a result improving nurse's attitude toward those patients and replacing it by positive one are prerequisites for optimal patient care..

Caring behavior is defined as actions characteristic of concern for the well-being of a patient, such as comforting, attentive listening, empathy, confidential, show interest, honesty, nonjudgmental, acceptance, and others behaviors which help substance drug user to be independent and to solve his/her problems ,and to cope in his/ her life [13,14]. Nurses are directly involved in providing care for patients with substance abuse disorder and they are in a key position to care patients suffering from substance abuse [9,11]. In this respect multi studies stated that the fundamental caring responsibility of the nurse who is working with SUB patients fourfold to promote health, to prevent illness, and alleviate suffering. Therefore, nurse has to know more about caring behavior skills for providing effective nursing care of patients with substance use disorder [7,9,15].

Caring education and training and for nurse about substance use disorder in many countries has been patchy, inadequate and generally non-strategic; additionally there are a lot of researches in this area revealed an apparent lack of psychiatric nurses' awareness of caring behaviors skills which should be one of psychiatric nurses' specialties. [16,17] Lack of nursing caring education may be a crucial barrier towards effective care with this client group, despite staff in acute psychiatric wards felt ill-equipped to offer an adequate care, and indicated that they would welcome opportunities to enhance their performance. [13,18] There are many factors that affect nurses' attitude and caring behaviors toward patients with

substance use disorder, these factors include stigma about substance use disorder, lack of knowledge, lack of skills and havening no time to attend conference to so huge percentage of nurses have gaps learn about patients with substance use disorder, in their knowledge and skills toward substance use disorder patients, which causes them to behave toward SUD patients inappropriately [14,19].

1.1. Significance of the Problem

Nurses are the forefront health care members working in close proximity to substance use disorder (SUD) patients. They remain the most important persons in providing caring for these patients and they play the pivotal caregiving role for them. To do this important role, nurses need to have good knowledge, positive attitude and caring behaviors toward those patients. However, perceptions of discrimination and lack of caring behaviors on the part of nursing staff among patients undergoing treatment for SUD constituted a significant predictor of whether the patients completed treatment [8,9].

Nurses consistently say lack of knowledge of caring for patients with substance use disorders contributes to their negative feelings, poor attitude and poor caring behavior skills which caused "a disconnect in their ability to care for patients with SUD." This knowledge and training deficit can perpetuate suboptimal care. The acquisition of a high level of knowledge, positive attitudes and caring behaviors will upgrade nursing ethics especially compassion, cognitive and emotional empathy for SUD among nurses, resulting in the promotion of quality of care. Yet education can lead not just to more effective care but also to improved attitudes and caring skills.

1.2. Aim of the Study

The study aimed to evaluate the effect of educational caring program on the nurses' attitude and their perception of caring behavior toward substance use disorder patients.

1.3. Research Hypothesis

The attitude of nurses toward substance use disorder patients and their perception of caring behaviors are expected to be enhanced after implementation of educational caring program.

2. Subjects and Method

2.1. Research Design

A quasi-experimental research design was used in the current study.

2.2. Research Setting

The study was conducted at Shopra kas center for addiction, the center is affiliated to the General Secretariat of Mental Health. The capacity of the center is 30 beds and it provides health care services to Gharbya, Menofia, Sharkia, Dakahelia and Kafr-ilsheikh governates.

2.3. Subjects

According to (Epi-Info program) the subjects of this study consisted of 50 nurses who provide direct care for patients with substance use disorder. The subjects were selected by convenient sampling.

The sample size was calculated by adjusting the power of the test to 80% and the confidence interval to 95% with margin of error accepted adjusted to 5% and a known total population 75 nurses. Based on sample size equation 50 nurses participated in the study.

2.4. Tools of the Study

The data of this study was collected by using the following two tools:

Tool I: Substance Abuse Attitudes Survey (SAAS):

Substance Abuse Attitudes Survey (SAAS) was developed by Chappel et al., 1985 [20]. It consisted of 27 items, designed to measure nurses' attitudes towards substance abuse and it composed of five subscales:

1. **-Permissiveness subscale:** it included 8 questions (from 1 to 8) implied nurse' accepting substance use within a continuum of normal human behavior. Like statement "Cannabis should be legalized".

2. **Treatment intervention subscale:** - it composed of 5 questions (from 9 to 13). This subscale related to nurse' orientation towards perceiving substance use/misuse in the context of treatment and intervention. Like statement "Family involvement is a very important part of the treatment drug dependence".

3. **Non stereotypes subscale:** It consists of 4 questions (from 14 to 17). It was about nurse' non reliance on popular societal stereotypes of substance use and substance users. Like statement "People who use cannabis usually do not respect authority".

4. **Treatment optimism subscale:** It had 5 questions (from 18 to 22) related to nurse' optimistic perception of treatment and the possibility of a successful outcome. Like statement "Drug dependence is a treatable illness".

5. **Non-moralism subscale:** It involved 5 questions (from 23 to 27). It was linked to nurse' absence or avoidance of moralistic perspective when considering substance use and substance users. Like statement "Street dealers are the initial source of drugs for young people".

Scoring system

Each item is scored on a 3-point Likert scale ranging from 1 (strongly disagree) to 3 (strongly agree). The minimum score is 27 and maximum score is 81. Scoring system of these questionnaires was as followed:

- < 50% = Poor attitude
- 50 - 75% = Neutral attitude
- > 75% = Good attitude

Tool II: Caring Behavior Assessment Tool (CBA)

The caring behavior assessment tool was developed by Cronin and Harrison (1988) [21]. It adapted to assess nurse' perception regarding caring behavior toward substance abuse patients. The caring behavior assessment tool (CBA) is a 63 item questionnaire that used a 5 likert scale to reflect the degree to which each nursing behavior reflects caring. It was ascending scale from 1=little importance to 5= much importance. It ordered in seven subscales as following:-

1. **Humanism / faith - hope/sensitivity subscale:** - It was from 1 to 16 questions. This subscale related to human rights of substance use disorder patients as a human being. Like statement " *Treat the patient as an individual*".

2. **Helping trust subscale:** - It included 11 questions from 17 to 27. This sub subscale related to provide trust from nurse to substance use disorder patients. Like statement " *Really listen to the patient when talk*".

3. **Expression of positive /negative feelings subscale:** - It had 4 questions from 28 to 31, this subscale related to help substance use disorder patients to express his feeling freely without fear. Like statement " *Encourage the patient to talk about how he feels*".

4. **Teaching / learning subscale:** - it contained 8 questions from 32 to 39. It related to provide substance use disorder patients some skills that help him to be independent person. Like statement " *Help the patient set realistic goals for his health*".

5. **Supportive, protective- corrective environment subscale:** it included 10 questions from 40 to 49. This subscale related to provide substance use disorder patients support to prevent relapse. Like statement " *Explain safety precautions to the patient and his family*".

6. **Human needs assistance subscale:** it was from 50 to 60 questions. It concerned by assisting substance use disorder patients in his need. Like statement " *Check the patient condition very closely*".

7. **Existential /phenomenological / spiritual forces subscale:** - It involved 3 questions 3 questions from 61 to 63, this subscale related to assist substance use disorder patients to improve self-stem. Like statement " *seem to know how the patient feel*".

Scoring system

Each nurse can receive score ranging from 63 to 315 grades. Scoring system of this questionnaire was as follow:

- < 50% = Poor caring behavior skill
- 50 - 75% = Neutral caring behavior skill
- > 75% = Good caring behavior skill

The study tools were attached by Socio Demographic and clinical characteristic questionnaire developed by the researchers. It was used to assess the socio demographic data and clinical characteristic about nurses. It included 6 items age, gender, educational level, years of experience in nursing, years of experience in care of substance use disorder patient, and having work shop related to substance use disorder.

2.5. Method

1. An official letter was issued from Faculty of Nursing, Tanta University to director of the studied setting to obtain permission for data collection.

2. Tools of the study were translated into Arabic language by the researcher and were tested for content validity by a jury of five experts in the field of psychiatric nursing to ascertain the appropriateness of items for measuring what they are supposed to measure and both tools were proved to be valid.

3. Ethical considerations were considered in conducting study

a. Oral consent for voluntary participation was obtained from all nurses participating in the study.

b. The subjects were informed about the aim of the study and reassured about the confidentiality and privacy of any obtained information and used only for the purpose of the study.

c. Respecting the right of the study subjects to refuse to participate or to withdraw from the study at any phase was emphasized.

d. The nature of the study not produces harm for subject.

4. A pilot study was carried out before embarking in the field of work on 10% from total subjects to ascertain the clarity and applicability of the study tools. Also it served to estimate the approximate time required for filling study tools as well as to identify obstacles that might be faced during data collection. No modification was done on study tools. The pilot subjects were excluded later from actual study sample.

5. Internal consistency of the study tools were done by means of Cronbach's Alpha coefficient which yielded values of $r=0.924$ - $r=0.941$ respectively.

6. Actual study: -the study was carried out at seven months from July 2017 to January 2018.

The actual study was divided into the four phases:-

I) Phase one: - Assessment phase (pretest)

- Tools of the study were distributed on the study subjects in individual basis and the subjects were asked to fill the questionnaire in the presence of researcher for any clarification and time required for filling the questionnaire ranged from 25 to 30 minutes, this phase aimed to determine the study subject's needs as a base line educational program.

II) Phase two: - Development of the educational caring program

- Educational program about caring SUD patients was developed by the researchers based on reviewing of the recent related literatures and the result of phase one.

- The general objective of the educational program aimed to improve the nurses' attitude and their perception of caring behavior toward substance use disorder patients.

- The educational program consisted of theoretical and practical parts in which each one has set of specific objectives. The objective of theoretical part of educational program was providing the studied nurses with theoretical knowledge about substance use disorder, attitude and caring behavior. Meanwhile the objective of practical part was providing the study subjects with caring skills like humanistic skills, teaching and learning skills, and supportive skills.

- The prepared program was written into a simplified Arabic language by the researchers.

III) Phase three: - Implementation of The educational caring program

- The educational program was implemented in 12 sessions (the first one is introductory session, five sessions for theoretical part, five sessions for practical part and the final session was summery for contents of program).

- The sessions were scheduled as 2 sessions per week for duration of 6 weeks. The time for each session was about (45-60 m).

- The educational program was carried out in the training room of study setting on small group basis. The

studied nurses classified into 8 subgroups. Each sub group composed of 5-7 nurses.

- Lecture, group discussion, brain storming, simulation and role play were used as teaching method in implementation of educational program.

-The sessions were implemented as following schedule:-

- Session (1): introductory session:-

At this session researcher acquainted with studied group and explained the purpose, scheduled and outlines of the program and conducted pretest.

- Theoretical part including 5 sessions (from session 2 to session 6)

-Sessions (2 -3):-

The aim of these sessions was to provide study subjects with knowledge about substance dependence (definition, main terminology, causes, types, classification of substance dependence and treatment modalities).

- Sessions (4 - 5):-

These sessions focused on knowledge about professional nurse attitude toward substance use disorder patient (concepts of attitude, component of attitude, types of attitude, importance of positive attitude and strategies to improve nurses' attitude such as eradicating stigma and enhancing optimistic view of the nurse).

- Session (6):-

The aim of this session was to provide study subjects with knowledge about caring behaviors (definition, types of caring behaviors and importance of caring behaviors).

The theoretical sessions were implemented by using lecture interwoven with group discussion and sometimes demonstration method. Group discussion was used to enhance interest and promote active involvement of nurses. In addition to the examples, and illustrations which provided by the researchers for assuring understanding and the subjects also provided additional examples from their professional experiences.

- Practical part containing 5 sessions (from session 7 - to session 11)

Session (7):-

This session aimed to enabling nurses to recognize and apply humanistic skills such as empathy, sharing hope skill, active listening skill with substance use disorder patients.

Session (8):-

This session, spotted on nurses' applying communication skills with substance use disorder patients such as silence, broad opening, voice doubt and open end questions.

Session (9):-

The aim of this study was applying teaching and learning skill with substance use disorder patients as mental preparation skills, diversifying stimuli skills, stimulating motivation skills, positive and negative reinforcement.

Session (10):-

At the end of this session, nurses will be able to adherence to life skill (functional social interactions), and determine it's important for substance use disorder patients

Session (11):-

At the end of this session, nurses will be able to identify definition of stress and apply its management like relaxation technique, time management skills, praying and ventilation skills.

In the practical sessions, the researchers used mainly role play, simulation, demonstration and re demonstrations as method of teaching .Role play was carried out between both the researcher and studied nurses and between nurses themselves. Handout papers about simulated situations and scenario were distributed to all studied nurses at the beginning of each session. In each practical session, simulated nurse, patient situations presented by the researcher through data show and then discussed with the studied subjects.

Session (12): Summary session

At the end of this session, nurses will be able to summarize the main point of educational program and conduct the post test.

IV phase four (Evaluation phase):-

This phase is concerned with the evaluation of the implemented educational program. The tools of the study were reapplied twice on all study subjects on an individual basis as following.

- Immediately after implementation of the educational program.
- Three months later after completion of the educational program.

5- Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 16. For quantitative data, the range, mean and standard deviation were calculated. For comparison between means, t-test was used. A significance was adopted at P<0.05, P<0.001 for interpretation of results of tests of significance and highly significance respectively.

3. Results

Table 1 presents the socio-demographic and clinical characteristics distribution of the studied nurses. The results revealed that more than half of nurses 62 % were female, and the mean age of them was (30.18±8.098). Regarding their educational level, 48%of them had

diploma degree in nursing. In relation to experience year in nursing as a general, 46.0% of them had experience more than >10-20 years and 42% of the studied nurses had experience < (1-10) years in substance use disorder. More than have of studied nurses (56.0%) had workshop in substance use disorder.

Table 1. Distribution of Studied Nurses According to Their Socio-Demographic and Clinical Characteristics

Socio-Demographic Characteristics	Number (n=50)	%
Sex		
Male	19	38
Female	31	62
Age		
<30	22	44
30-35	13	26
>35-40	15	30
Mean ± SD	(30.18±8.098)	
Educational level		
Diplom	24	48
Technician	11	22
Bacaloric	13	26
Post graduate	2	4
Experience year in Nursing		
<1-10 years	21	42
>10-20 years	23	46
>20 years	6	12
Experience year in substance use disorder patients		
<1-10 years	23	46
>10-20 years	21	42
>20 years	6	12
Having workshop in substance use disorder		
No	22	44
Yes	28	56

Table 2. Comparison the Mean Score of Studied Nurses in Relation to Substance Abuse Attitude Survey subscales (SAAS) Pre, Post immediate and Follow up the Educational Caring Program

Substance Abuse Attitude Survey Subscales (SAAS)		Mean score			Comparison	Difference		Paired T-test	
		Mean	±	SD		Mean	SD	T	P-value
Permissiveness attitude subscale	Pre	10.180	±	2.455	Pre-Post	-4.620	2.649	-12.333	0.000
	Post	14.800	±	1.229	Pre-Follow up	-3.340	2.883	-8.192	0.000
	Follow up	13.520	±	1.568	Post-Follow up	1.280	1.874	4.830	0.000
Treatment intervention Attitude subscale	Pre	6.980	±	1.518	Pre-Post	-2.160	1.695	-9.013	0.000
	Post	9.140	±	0.948	Pre-Follow up	-1.500	1.865	-5.686	0.000
	Follow up	8.480	±	1.328	Post-Follow up	0.660	1.081	4.319	0.159
Non stereotypes Attitude subscale	Pre	4.180	±	1.535	Pre-Post	-2.920	2.049	-10.078	0.000
	Post	7.100	±	1.035	Pre-Follow up	4.880	2.076	-9.807	0.000
	Follow up	8.060	±	1.580	Post-Follow up	0.040	0.198	1.429	0.000
Treatment optimism attitude subscale	Pre	5.460	±	1.568	Pre-Post	-2.980	2.143	-9.834	0.000
	Post	8.440	±	1.580	Pre-Follow up	-2.940	2.142	-9.705	0.000
	Follow up	9.400	±	1.678	Post-Follow up	0.040	0.198	1.429	0.000
Non- moralism attitude subscale	Pre	5.380	±	1.640	Pre-Post	-3.460	1.887	-12.968	0.000
	Post	8.840	±	1.376	Pre-Follow up	-3.440	1.875	-12.971	0.000
	Follow up	7.820	±	1.366	Post-Follow up	0.020	0.141	1.000	0.322

Highly significance P<0.001.

Table 2 represents comparison the mean score of studied nurses in relation to Substance Abuse Attitude Survey subscales , the results revealed that there is highly statistically significant improvement in nurses treatment optimism attitude subscale before, immediately after implementation of the educational program (P-value <0.000*).It can be noticed that studied nurses had mean score of treatment optimism attitude subscale before program (5.460± 1.568), while this level increased to (8.440± 1.580) immediately after program then descends at follow up to become(9.400±1.578). In relation to their mean score of treatment intervention attitude subscale, where studied nurses had mean score of treatment intervention attitude subscale before program (6.980± 1.518), while this level became high immediately and three months after program (9.140± 0.948& 8.480±1.328 respectively). The results revealed that there is highly statistically significant improvement in the nurses treatment intervention attitude subscale before and post, pre and follow up & post and follow up implementation of the educational program in which (P-value < 0.000*).

The same table represents distribution of the studied nurses in relation to their mean score of treatment optimism attitude subscale, the results revealed that there is highly statistically improvement significant in relation to nurses treatment optimism attitude and non-stereotypes attitude subscale before, immediately after implementation of the educational caring program in which (P-value < 0.000*).

Figure 1 illustrates total mean score of Substance Abuse Attitude Survey among the studied nurses pre, post immediate and follow up the implementation of educational caring program .The results revealed that there is highly statistically significant difference in total mean score of Substance Abuse Attitude Survey among the

studied nurses before, immediately, and after three month from implementation of the educational caring program. Results found that studied nurses had mean score of before program (32.180± 3.691) while this level increased to (48.320±3.159& 46.280±3.540) immediately and follow up respectively. (P-value < 0.000*). This means that the attitude of the studied nurses toward substance use disorder patients had significantly positively changed after implementation of training program.

Table 3 shows comparison the mean score of studied nurses in relation to the caring behavior skill scale, regarding to subscale (Humanism .faith -hope) skill, The results revealed that there is highly positive statistically significant difference between nurses caring behavior subscale (Humanism .faith -hope skill) before, immediately after, and after three month from implementation of the educational caring program (P-value < 0.000*). Where studied nurses had mean score of caring behavior subscale (Humanism .faith -hope skill) before program (20.620 ±3.613), while this level became high immediately and three months after of implementation the program (27.900±3.512 & 27.760±3.467 respectively).

Also, it reveals a comparison of caring behavior subscale (Teaching / learning skill)within study sample pre - post, pre - follows up & post -follow up the study. It was found that the mean score among caring behavior subscale (Teaching / learning) skill was highly improved after conducting the program than before as (P-value < 0.000). Where studied nurses had mean score of caring behavior subscale (Teaching / learning) skill Pre-Follow up the program was (- 4.620±3.551). Also studied nurses had mean score of caring behavior subscale (Teaching / learning) skill pre-post program is (-4.900±3.448).

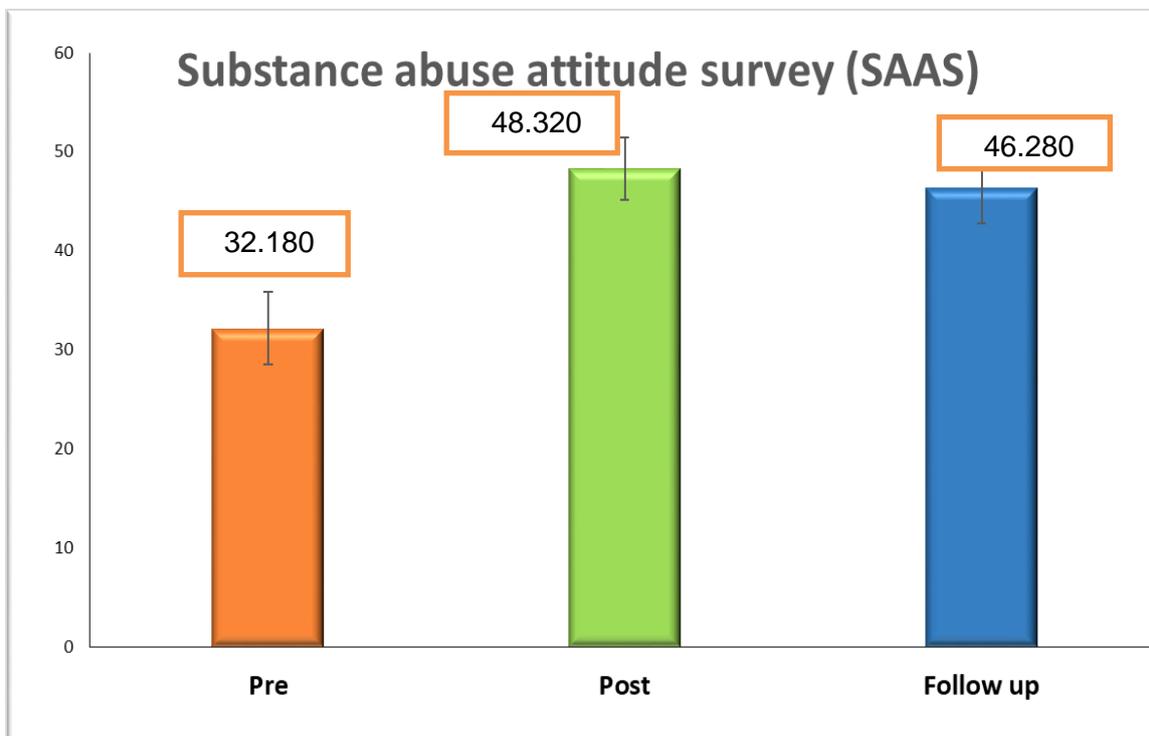


Figure 1. Total Mean Score of Substance Abuse Attitude Survey (SAAS) among The Studied Nurses Pre, Post and Follow up The Implementation of Educational Caring Program (Highly significance P<0.001)

Table 3. Comparison the Mean Score of Studied Nurses in Relation to Caring Behavior Skill Scale Pre, Post and Follow up The Implementation of Educational Caring Program

Caring behaviors skills subscales					Comp.	Difference		Paired T-test	
		Mean	±	SD		Mean	SD	t	P-value
Humanism .faith - hope subscale	Pre	20.620	±	3.613	Pre-Post	-7.280	4.155	-12.388	0.000
	Post	27.900	±	3.512	Pre-Follow up	-7.140	4.150	-12.165	0.000
	Follow up	27.760	±	3.467	Post-Follow up	0.140	0.405	2.447	0.018
Helping and Trust subscale	Pre	11.240	±	3.572	Pre-Post	-7.620	4.257	-12.659	0.000
	Post	18.860	±	2.928	Pre-Follow up	-7.600	4.238	-12.681	0.000
	Follow up	18.840	±	2.874	Post-Follow up	0.020	0.377	0.375	0.709
Expression of positive /negative feelings subscale	Pre	3.860	±	1.107	Pre-Post	-2.700	1.764	-10.822	0.000
	Post	6.560	±	1.373	Pre-Follow up	-2.620	1.737	-10.668	0.000
	Follow up	6.480	±	1.344	Post-Follow up	0.080	0.274	2.064	0.044
Teaching / learning subscale	Pre	8.940	±	2.979	Pre-Post	-4.900	3.448	-10.049	0.000
	Post	13.840	±	2.054	Pre-Follow up	-4.620	3.551	-9.200	0.000
	Follow up	13.560	±	2.082	Post-Follow up	0.280	0.882	2.246	0.029
Supportive, protective- corrective environment subscale	Pre	10.080	±	2.754	Pre-Post	-5.980	3.317	-12.750	0.000
	Post	16.060	±	2.590	Pre-Follow up	-5.140	3.493	-10.404	0.000
	Follow up	15.220	±	2.859	Post-Follow up	0.840	1.683	3.530	0.001
Human needs assistance subscale	Pre	11.400	±	4.252	Pre-Post	-6.860	5.071	-9.566	0.000
	Post	18.260	±	2.813	Pre-Follow up	-6.640	5.082	-9.239	0.000
	Follow up	18.040	±	2.941	Post-Follow up	0.220	0.887	1.753	0.086
Existential/phenomenological / spiritual forces subscale	Pre	2.840	±	1.646	Pre-Post	-1.940	6.551	-6.776	0.000

Highly significance $P < 0.001$.

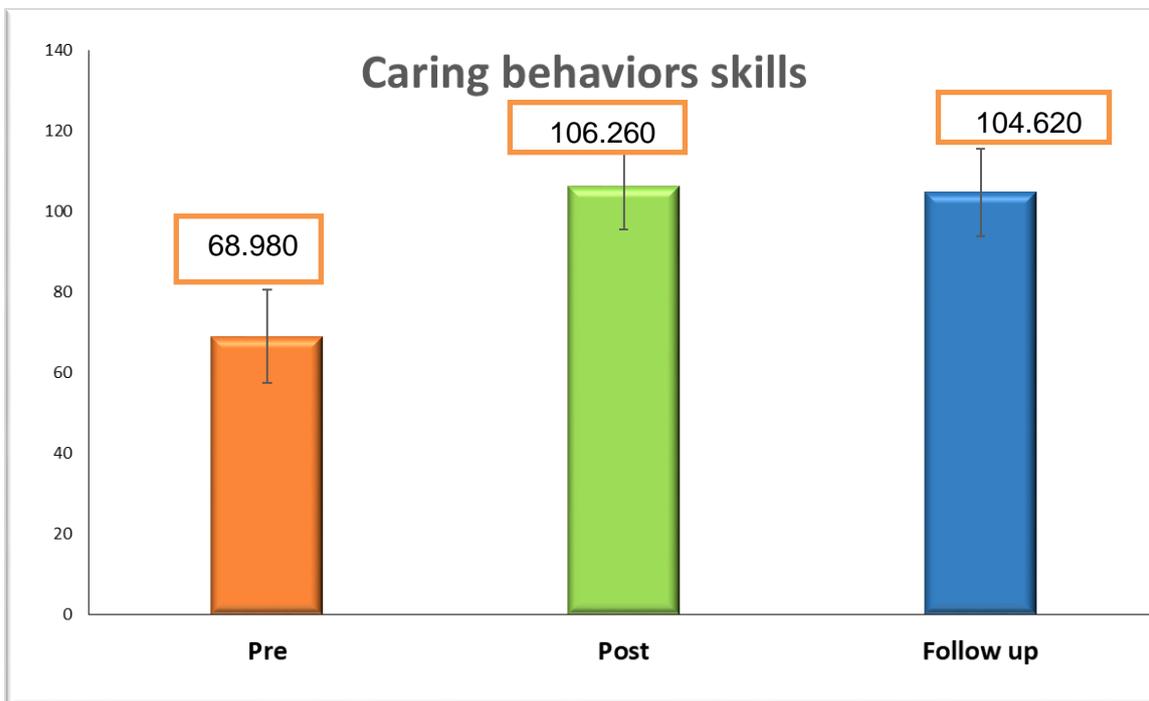


Figure 2. Total Mean Score of Caring Behavior Skill Scale among Studied Nurses Pre, Post and Follow up The Implementation of Educational Caring Program (Highly significance $P < 0.001$)

Figure 2 represents total mean score of Caring Behavior Skill Scale among studied nurses pre, post and follow up the implementation of educational caring program. The results revealed that there is highly statistically significant improvement on total mean score of studied nurses' perception regarding caring behavior before, immediately

after, and after three month from implementation of the educational caring program ($P\text{-value} < 0.000^*$). Where studied nurses had total mean score regarding caring behavior before program (68.980 ± 11.578) and this level became high immediately and three months after program (106.260 ± 10.913 & 104.620 ± 10.913 respectively).

4. Discussion

Getting to know how nurses feel and believe about SUD patients can affect on patient's outcome. Working on improving nurses' attitude and their perception of caring behavior toward SUD patients is the cornerstone to possible solution for effective nursing intervention for SUD patients. [18] Alongside with this, the present study conducted to improve attitude and perception of caring behavior skills of the nurses by implementing the educational program.

The emerging result of the present study proved research hypothesis that nurse attitude toward substance use disorder patients had changed positively immediately and follow up three months later from the implementation of the educational program. This result is supported by Rawat (2009) who found that there was significant improvements in nurse attitude after intervention than before [22]. In the same line, Tierney (2013) showed significant improvements for nurses' attitudes toward patients with substance use disorder after program implementation. [23].

As the general, the possible explanation of the enhancement of the nurses' attitude in the present study may be due to the development and implementation process of educational caring program. The educational caring program was mainly developed based on the studied nurses' needs beside its clarity and simplicity. Additionally in implementation phase, the researcher was very keen on using frequent repetition, and motivating staff to participate in both theoretical and practical of the educational program. For more clarification, in theoretical sessions the researchers gave it by using lectures interwoven with group discussion. Group discussion was used to enhance interest and promote the active involvement of nurses. Additionally, the researcher was very interesting in implementing the program in a warm and friendly environment which helps nurses to share and express their negative attitudes freely. On other side, in practical sessions the researchers used role play and simulation as a method of teaching. This method help nurses to be more self-awareness of their attitude toward patients particularly their negative attitude and give the researchers the opportunity to demonstrate a positive attitude that mainly helped in replacing negative attitudes by a positive one.

Optimistic view of nurses toward SUD considers the main factor and helpful entrance to improve nurses' attitude, and on the other hand pessimistic view of the nurse acts as a huge barrier to successful nursing intervention. (24) Following this line of reasoning. Findings of the present study indicated that the optimistic nurses' view significantly improved after implementing educational caring program, This improvement of nurses' optimistic view may be due to provision nurses with scientific knowledge and facts about SUD such as "drug dependence is a treatable illness, drug dependent person can be helped" which provide nurses with hope concerning SUD treatment. This result matched with Ashley (2016) who proved that the hope of nurse about SUD can be changed through knowledge and scientific facts which in turn affect positively in nurses' attitude [25]. Additionally this result was in keeping with Brenda (2017) who carried out study on nurses attitude, the

findings reported statistical significant relation of treatment optimism attitude subscale before and after training program. [26] In contrast to the current result Betty (2014) in his study found that the nurses have negative attitudes toward patients with SUD and there was no improvement in nurses' attitude after implementation of his training program. [27]

Society has a tendency to label and stereotype people who are abusing drugs. A nurse as a member of society also follows the views of society and stigmatizes those SUD patients resulting in negative nurses' attitude. [28] Along with this the researchers try to change nurses' discriminations of patients as step for enhancing their attitude. So one of specific objective of sessions of program of present study was eradicating nurses' stigma toward SUD patients. In this session, one of the studied nurses said that they saw SUD patients as unacceptable person, dangerous and drug seeker, as the result of what has been said the researcher intended to change nurses' myths and misconception about SUD patients by revealing real-life experiences of stigma, like statement "SUD patients aren't drug seeker". "Drug abusers are acceptable patients". "SUD like any other disorder can be treated and prevented". Changing of the studied nurses' stigmatized view of patients lead to improve their attitude toward those patients. This result was in line with, Mansour (2011) observed that there was statistical significant relation of non-stereotypes attitude before and after the program and in turn improved of nurses' attitude toward patients with SUD. [29]

Caring is a central concept of psychiatric nursing and the nurse is a dynamic agent in caring of patients with substance use disorder so the nurses must be understand that cater for their needs, and this require from nurse to be more self-confidence and more self- autonomy. This refers to the topical importance of educational program of caring behavior which enables nurses to provide effective care for those patients [30]. In the same stream, the result of current study pointed out the perceptions of caring behavior skills of nurses shaped positively after the implementation of educational caring program. This result was supported by Cristina & Margarita (2013) in their study who observed that there was significant improvements in nurse caring behavior skills after intervention than before [31]. Additionally Hunter (2018) in his study support the same result. [32]

This result may be due to successful effect of educational program which contained of five practical training sessions about different caring behaviors skills such as (humanistic skills, communications and supportive skills, self-dependent skills, teaching and learning skill in order to enhance caring behavior skills of nurses.

For more clarification after the researcher discussed knowledge about these skills by using attractive power points and videos. The researcher distributed written scenario about skills on studied nurses then role play is done. The researcher played role of nurse and studied nurses played role of patients. For example in session of communication skills and supportive like active listening, the researcher differentiate for nurses between listening and hearing by giving therapeutic and nontherapeutic response for situation then asking for the nurse' perception for more appropriate response represent listening and then

both researcher and studied nurses demonstrated both listening and hearing by role playing. In humanistic skills the researcher gives session to help nurse to apply humanistic skills for patients as respect the patient's humanity and rights, acceptance, honest, in the session nurses were asked about their response when patient asks for his treatment plan. What is the therapeutic response it is none of your business or when you become ready I will explain for you. Another example in implementation of teaching and learning skills as mental preparation skills, diversifying stimuli skills, and stimulating motivation skills, positive and negative reinforcement.

5. Conclusion and Recommendations

Based on the results of the present study. The findings confirmed the importance of nurses' attitudes and nurses caring behavior skills in management of substance use disorder, and evidenced that educational program has enhancing effect on the nurses' attitudes and perception of caring behavior toward patients with substance use disorder.

Based on the previous findings of the present study and conclusion, the following recommendations are suggested

- Up-to-date in-service training programs on regular basis for nurses' dealing with SUD patients about attitude and caring behavior skills.
- Incorporating caring SUD patients in educational curriculum of undergraduate nursing students.
- Incorporating educational and training program to hospital protocol as standardized caring strategy with SUD patients
- Hospital policies must encourage nurses to attend an in-service training program about new health issues and its trends related to SUD.

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