



Article

Assessment of Eye Care Behavior among Non-Insulin Dependent Diabetic Patients

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Abstract

Diabetes can harm the eyes and damage the small blood vessels leading to retinal ischemia and increased vascular permeability causing blindness; almost all patients with diabetes need regular eye assessment to decrease the incidence of long duration of diabetes retinal complications. To assess the eye care behavior among non-insulin-dependent diabetic patients. A descriptive research design was utilized to fulfill the aim of this study. Setting: The study was conducted in the Internal Medicine Department and Ophthalmic Clinics at Sohag University Hospital. Sample: A Purposive sample of 60 adult patients with non-insulin dependent diabetes mellitus from both males and females aged between (40-60) years old. Patient's structured interview questionnaire. Assessment of patient's knowledge questionnaire. The findings revealed that the mean age of patients was (53.31± 5.20), half of the patients were female, and (56.7%) were married. According to occupation, about (13.3%) were farmers, and (36.7%) of them were illiterate. Regarding patient's knowledge, (96.7%) of patients had an unsatisfactory level of knowledge Also 100% of patients did not have regular vision examination, and the mean scores of total eye care practice behavior were was 10.95±5.64 respectively. The eye care behavior of non-insulin-dependent diabetic patients has been shown as inappropriate. Recommendations: Development of an educational program that can promote/improve eye care in diabetic patients.

Keywords

Non-Insulin Dependent Diabetic, Eye Care behavior

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1. Introduction

Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or alternatively, when the body cannot effectively use the insulin, it produces. Hyperglycemia, or

raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels (Alustiza & Elena, 2020).

Non-insulin-dependent or adult-onset (type 2 diabetes) results from the body's ineffective use of insulin. Type 2 diabetes comprises 90% of people with diabetes around the world and is largely the result of excess body weight and physical inactivity. Symptoms increased thirst, frequent urination, and unexplained weight loss. Symptoms may also include increased hunger, feeling tired, and sores that do not heal. The development of type 2 diabetes is caused by a combination of lifestyle and genetic factors. While some of these factors are under personal control, such as diet and obesity, other factors are not, such as increasing age, female gender, and genetics (Huang et al., 2017).

Non-insulin-dependent diabetes mellitus (NIDDM) causes changes in all body organs, and it may result in serious or sometimes dangerous complications for the patients. An increase in blood sugar alone does not lead to any problem in patients, but it progresses toward its complications gradually without making any sign. Diabetes complications are very different and various, such as ocular complications and changes in blood vessels (the veins and arteries). This condition damages the eye retina slowly so that patients may not realize their diseases in the first stages (Saedi et al., 2016)

Diabetic retinopathy also known as diabetic eye disease is a medical condition in which damage occurs to the retina due to diabetes mellitus. It is a leading cause of blindness. Diabetic retinopathy affects up to 80 percent of those who have had diabetes for 20 years or more. At least 90% of new cases could be reduced with proper treatment and monitoring of the eyes. The longer a person has diabetes, the higher his or her chances of developing diabetic retinopathy. Each year in the United States, diabetic retinopathy accounts for 12% of all new cases of blindness. It is also the leading cause of blindness in people aged 20 to 64 years (li et al.,2020).

Eye care behavior is considered an important factor in preventing complications of diabetic retinopathy, as many studies indicate that diabetic patients have poor knowledge of eye care methods and ocular complications. The development of educational programs on diabetes increases knowledge about the complications of diabetes and reduces the incidence of morbidity and mortality rate. Also, increasing the level of knowledge will improve self-care behaviors and attitudes in diabetic patients (Rahaman et al.,2017).

2. Materials and Methods

2.1. Technical design

A descriptive research design was utilized to fulfil the aim of this study.

Setting: The study was conducted at the Internal Medicine Department on the 4th floor and Ophthalmic Clinics on the ground floor of the clinics building at Sohag University Hospital-Egypt. The flow rate of patients in Ophthalmic Clinics at Sohag University Hospital is about 20 cases monthly.

Sample: Purposive sample of 60 adult patients with non-insulin-dependent diabetes mellitus was selected according to certain inclusion criteria.

Inclusion criteria: Patients both males and females aged 40-60 years old had diabetes for over 5 years and were at-risk of the danger of ocular complications that be evidenced by clinical investigations and physician diagnosis.

2.2. Sample size using power analysis:

The Sample size was estimated with the statistical program (Mini tab 17) and determined according to this equation: -

$$Ss = \frac{Z^2 P (1 - p)}{C^2}$$

Where Z = 1.96

C = 0.08

p = 0.5

$$\text{New ss} = \frac{\text{ss}}{(1 + \frac{\text{ss}-1}{\text{Pop}})}$$

(Pop) is the population= 160

New ss = 53

Minimal required sample = 53

2.3. Study tools

To collect the necessary information for this study the following tools were used:

Tool I: The Patient's structured interview questionnaire includes four parts:

It was developed by the researcher based on the national and international reviews (Hamzeh, et al., 2019).

Part 1: Socio-demographic data of the patient: this part aimed to assess data such as age, gender, level of education, marital state, income, and occupation.

Part 2: Medical data assessment: this part was developed to assess patient medical history, it includes the history of current disease, past medical diseases, surgical history, family history, smoking status, follow-up, and current medication.

Part 3: Patient's laboratory investigations assessment: to assess (Glycated hemoglobin (HbA1c), Fasting Blood Sugar (FBS) levels) and random blood sugar.

Part 4: Patient clinical examination assessment: Patients were examined by an ophthalmologist to rule out any possible single and symptoms of retinopathy.

Tool (II): Assessment of patient's knowledge questionnaire:

This questionnaire was designed by the researcher based on current and international literature Rockefeller (2016) to assess the following:

Section (1): Patient's knowledge about non-insulin-dependent diabetes such as definition, types, signs and symptoms, causes, and complications, and it includes 5 multiple-choice questions.

Section (2): Patient's knowledge about medication such as action, side effects, precautions, and complications include 4 Yes or No questions

Section (3): Patient's knowledge about preventive methods of ocular complications and disease control and includes 5 Yes or No questions.

Scoring system:

For the knowledge items, a correct answer response was scored 1 and an incorrect answer scored 0. The scores were converted into a percent score. The Patient's total level of knowledge has been classified as follows, satisfactory if the percent score was 70% or more and unsatisfactory less than 70%.

Tool (III): Patient's eye-care practices observational checklists: Checklists were developed by the researcher, and used to assess eye-care practice procedures such as how cleansing the eye, instillation of eye drops, instillation of eye ointment, preventive behavior for ocular complications (such as jogging at least 3 times a week and each time for 20 minutes, regular diabetic treatment consumption, visiting ophthalmologist every 3 to 4 months, having an appropriate prescribed diet program, visiting the clinic for measuring blood sugar control and consultation, and participating at educational classes) and self-measuring of blood glucose level (Home Blood Glucose Test),

Scoring system:

For the practice items, each item was categorized and scored into either done=1 or not done=0 on all items. The scores were converted into a percent score and have been classified as follows, satisfactory if the percent score was 75% or more and unsatisfactory if less than 75%.

2.4. Operational design

Phase I: Preparatory phase

The patient's oral agreement for voluntary participation was obtained, and the purpose and nature of the study were explained to the patient, this includes reviewing recent related literature and theoretical knowledge of various aspects of the study using books, articles, periodicals, and magazines to develop tools for data collection.

Content Validity and reliability

Testing validity of the proposed tools; by using face and content validity. Face validity is the extent to which a tool appears to measure what it is supposed to measure. Content validity is the extent to which items are relevant to the content being measured (Gravetter et al.,2015). Validity was tested through a panel of five experts 3 in the field of medical-surgical nursing and 2 experts in ophthalmology medicine. Their opinion was elicited regarding the clarity, comprehensiveness, applicability, accuracy, and prevalence of the tools, and correction was carried out accordingly.

Testing reliability: Reliability is the degree to which an assessment tool produces stable and consistent results (Moskal et al.,2016). Reliability was tested statistically using Cronbach's Alpha which showed a satisfactory level for each tool as follows (0.76, 0.80, 0.72 & 0.89, respectively).

Pilot study

A pilot study was conducted on 10% of the patient sample (6 patients) to test the applicability and feasibility of the study tools, obtained results were used as a guide to be reconstructing the modifications needed in the data collection tools, and the data obtained from the pilot study were analyzed no modifications were done, so those patients who were involved in the pilot study were included in the study.

Ethical considerations

Research proposal was approved by the Research Ethics Committee of the Faculty of Nursing, Sohag University.

An official permission was taken from hospital administrators to conduct the study.

Oral consent was obtained from patients included in the study.

The purpose and nature of the study as well as the importance were explained to the participants who met the inclusion criteria.

Anonymity and confidentiality were assured.

Participants were assured that participation in this study was voluntary, and they have the right to withdraw from the study at any time without any penalty.

Study sample privacy was considered during data collection.

Fieldwork: The study was conducted through 3 phases (Assessment and planning phase, implementation phase)

A- Assessment and planning phase:

This phase emphasizes patient assessment, the study sample was approached individually by the investigator to collect the data, it was done through data collection from the subjects through the following: Demographic data, medical data, and patient laboratory investigations. As regards

tool (III) Patient’s eye care practices observational checklists, some educated patients were asked to fill the questionnaire as a self-reported questionnaire, and other patients asked the investigator to read the questionnaire for them and check their responses. The investigator conducted a structured interview for 15 to 30 minutes (with a mean of 22 minutes).

B- Implementation phase

Data were collected from Internal Medicine Department and Ophthalmic Clinics at Sohag University Hospital; data were collected over three months period. During the initial interview, the researcher introduced herself to initiate a line of communication to facilitate the implementation of the tools. The patient was interviewed individually and assessed by using (tools I, tool II, and tool III) the tools were all filled through interviewing. The purpose of the study was explained to the patients prior to answering the questions. The study was carried out during morning and afternoon shifts for all available patients.

2.5. Statistical design

The collected data were tabulated and statistically analyzed to assess eye care behavior among non-Insulin dependent diabetic patients under study as regards the various variables by computer program SPSS" ver. 16" Chicago. USA Data expressed as number and percentage, using likelihood ratio to determine significance for the group.

P 0.05 non- significant. P ≤ 0.05 significant. P ≤ 0.001 highly significant.

3. Results

This section may be divided into subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusion that can be drawn.

Table (1): This shows the distribution of patients regarding their socio-demographic characteristics. It was noticed that the mean age of patients was (53.31± 5.20), half of the patients were female, (and 56.7%) were married. According to occupation, about 13.3% were farmers. (51.7%) of patients were from (4 to 6) persons and (36.7%) of them were illiterate. According to income, it was observed that (56.7%) of patients did not have enough income.

Table (2.): This shows that 100% of patients did not have regular vision examinations.

Table (3.): This shows the distribution of the total score of the patient’s knowledge, it shows that (3.3%) of patients had a satisfactory level of knowledge, while (96.7%) of patients had an unsatisfactory level of knowledge.

Table (4.): Shows that there was no statistically significant difference between patients' knowledge and socio-demographic characteristics except for age with *p*- value (0.001)

Fig (1): Illustrates that the mean scores of the total eye-care practice behavior for the study sample were was10.95±5.64.

Table 1. Frequency distribution of socio-demographic characteristics of the studied patients (N=60)

| Variables | socio-demographic data | |
|--------------|------------------------|------|
| | No. (60) | % |
| Age by years | 53.31± 5.20 | |
| Sex | | |
| Male | 31 | 48.3 |

| | | |
|---------------------|----|------|
| Female | 29 | 51.7 |
| Level of education | | |
| Illiterate | 22 | 36.7 |
| Read and write | 13 | 21.7 |
| Average learning | 19 | 31.7 |
| University | 6 | 10.0 |
| Marital status | | |
| Single | 4 | 6.7 |
| Married | 34 | 56.7 |
| Divorce | 8 | 13.3 |
| Window | 14 | 23.3 |
| Occupation | | |
| Employee | 15 | 25.0 |
| Farmers | 8 | 13.3 |
| Technical work | 19 | 31.7 |
| No employee | 18 | 30.0 |
| Number of families | | |
| less than 4 persons | 20 | 33.3 |
| 4-6 person | 31 | 51.7 |
| more than 6 persons | 9 | 15.0 |
| Income enough | | |
| Not enough | 34 | 56.7 |
| Enough | 26 | 43.3 |

Table 2. Frequency distribution of patients regarding their follow-up (N=60)

| Variables | Frequency | | | |
|-----------------------------------|-----------|------|----|-------|
| | Yes | | No | |
| | N | % | N | % |
| Follow up | | | | |
| Regular clinic visit | | | | |
| Every month | 5 | 8.3 | 55 | 91.6 |
| Every 3month | 3 | 5.0 | 57 | 95 |
| Clinic visit when emergency | 8 | 13.3 | 52 | 86.7 |
| Times of blood glucose monitoring | | | | |
| Day | 16 | 26.7 | 44 | 73.3 |
| Weeks | 17 | 28.3 | 43 | 71.6 |
| Month | 27 | 45.0 | 33 | 55 |
| Vision examination | 0 | 0 | 60 | 100.0 |

Table 3. Frequency distribution of patients regarding their knowledge (n=60)

| Knowledge level | Frequency (No.) | Percent (%) |
|-------------------|-----------------|-------------|
| Unsatisfied level | 58 | 96.7 |

| | | |
|-----------------|----|-------|
| Satisfied level | 2 | 3.3 |
| Total | 60 | 100.0 |

Table 4. Relation between patients’ knowledge and socio-demographic characteristics (n=60)

| Variables | socio-demographic data | | |
|--------------------|------------------------|---------|----------|
| | Means ±SD | t .test | p. value |
| Age by years | 46.66±5.62 | 64.288 | 0.001** |
| Sex | | | |
| Male | 6.58±1.54 | 0.1150 | 0.736ns |
| Female | 6.72±1.729 | | |
| Level of education | | | |
| Illiterate | 6.31±1.52 | 0.6010 | 0.617ns |
| Read and write | 6.61±2.022 | | |
| Average learning | 6.94±1.649 | | |
| University | 7.00±.894 | | |
| Occupation | | | |
| Employee | 6.86±1.40 | 0.4690 | 0.705ns |
| Farmers | 7.00±1.195 | | |
| Technical work | 6.31±1.88 | | |
| No employee | 6.66±1.714 | | |

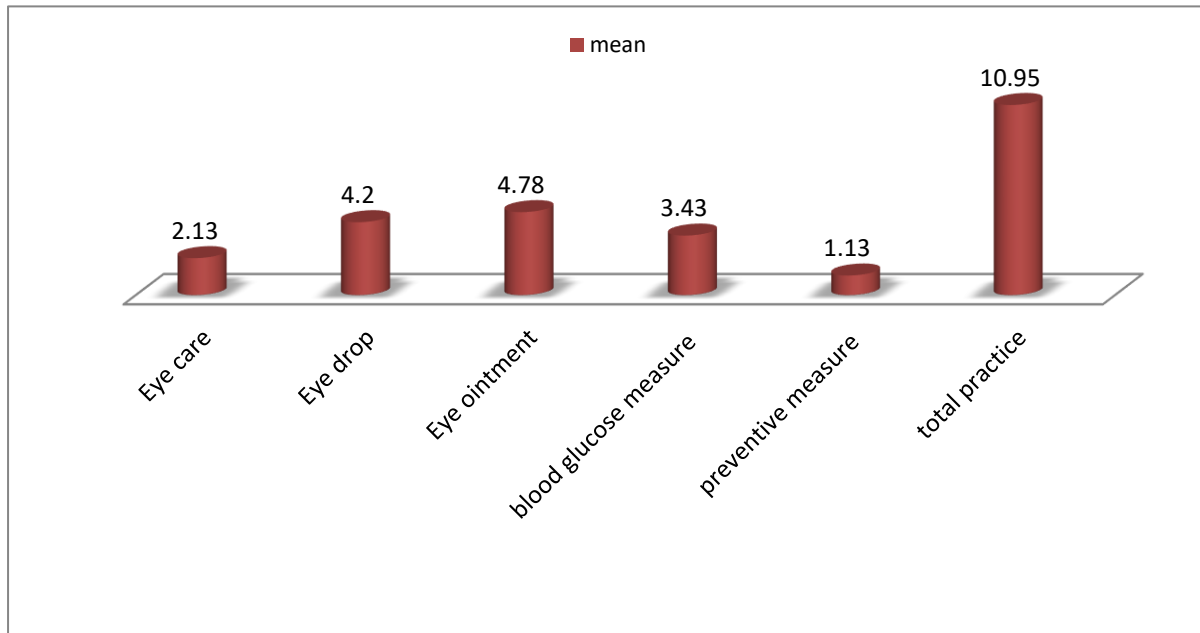


Figure 1. Frequency distribution of patients regarding total health practice

4. Discussion

The present study deals with a critical issue while caring for non-insulin- dependent-diabetes patients, especially in eye care practice. Based on the results of the present study; the half of patients were female, and as regards marital status, more than half were married. These findings are consistent with Chan and Yap (2016) in the study who reported that half of the study sample were

females. These may be due to being more susceptible to obesity as well as lack of exercise and a special diet that led to increased risk factors for diabetes mellitus as well as diabetic retinopathy.

Regarding the level of education, the study found that above half of the study sample were illiterate. This result matched with the study done by Srinivasan, et al., (2017) entitled "Diabetes and Diabetic Retinopathy: Knowledge, Attitude, Practice (KAP) among Diabetic patients in A tertiary Eye Care Centre" and with the study done by Islam, et al., (2018) entitled "Factors associated with participation in a diabetic retinopathy screening program in a rural district in Bangladesh" in both study and control group found that most of the sample was illiterate. From point of view, this may be due to more than half of the study samples being females with old age also due to cultural and societal differences, and health illiteracy as most of the patients lived in the rural area

According to occupations the current study found that approximately less than the half of the study sample was unemployed and most patients had low income, these may be due to the financial status acting as a barrier and it had a critical effect to access eye screening for early diagnosis of diabetic eye complication, this result was in the same line with the results done by Foster, et al., (2016) who indicated that most of the studied sample was farmers, had low income and they hadn't any type of medical insurance.

Regarding ophthalmic follow-up visits among the study sample; the present study reported that all study patients did not have regular vision examinations. These results agree with the study "Awareness of diabetes and diabetic retinopathy among a group of diabetic patients" which was done by Hamzeh & Aljaber (2019) who mention that most of the patients didn't visit an ophthalmologist after the diagnosis of diabetes and only one-quarter of the sample previously had a regular eye examination. It may be due to low family income and lack of knowledge about the importance of regular eye examination as well as more than half of the patients were females, as women commonly stated that they did not like to be a burden on other family members, even for health matters, because their role was to serve the family. Also, they were commonly not able to prioritize their own health care when there were many responsibilities in their home environment.

Regarding patient's knowledge, the current study revealed that only little from patients had a satisfactory level of knowledge These findings agree with Bakkar, et al., (2017) in the study of "Awareness of diabetic retinopathy among patients with type 2 diabetes mellitus in Jordan" who reported that the most of diabetic patients had a low level of awareness and information about diabetes and diabetic retinopathy.

Regarding the eye care practice level, the present study verifies that two-thirds of patients had incorrect eye care practices; this may be due to a decrease in health literacy, and a decreased level of patient education also because diabetic patients have not been informed with adequate knowledge about diabetic retinopathy and available treatment. This result is in the same line as the study of "Assessment of awareness of diabetic retinopathy among diabetics" done by Shetgar, et al., (2015) who reported that approximately three -a quarter of the patients had incorrect eye care practices.

Regarding relations between patients' age and knowledge, the current study found that there was a significant correlation between the age of patients and knowledge, ($P = 0.001$). The finding of this study was in the same line with studies done in the United Arab Emirates by Al-Maskari (2016) to " assess Knowledge, attitude, and practices of diabetic patients in the United Arab Emirates". And as well as a study was done by Islam et al., (2016) to "assess knowledge, attitudes, and practice of diabetes in rural Bangladesh" these results showed that there was a significant relationship between patient age with knowledge scores. In contrast to a study done by Fenwick, et al., (2015) which revealed that there was no relation between older age and diabetes patient knowledge.

5. Conclusions

Based on the findings of the present study, it can be concluded that: Eye care behavior among non-insulin-dependent-diabetic patients has been shown as inappropriate. Development of nursing

interventions that can promote/improve eye care in non-insulin-dependent diabetic patients, especially by means of the use of a self-care model in diabetic patients to prevent ocular complications.

References

- Alustiza, E., Amaia P., Maider M., Irene O., Garbiñe A., Olatz A., & Itziar V., (2020). Diabetes mellitus in adolescents: study in Euskadi. Madrid: *Anales de Pediatría*. Vol. 95. No(3). P186-196
- Al-Maskari, F., El-Sadig, M., Al-Kaabi, J. M., Afandi, B., Nagelkerke, N., & Yeatts, K. B. (2013). Knowledge, attitude, and practices of diabetic patients in the United Arab Emirates. *PLoS one*, 8(1), e52857.
- Bakkar, M. M., Haddad, M. F., & Gammoh, Y. S. (2017). Awareness of diabetic retinopathy among patients with type 2 diabetes mellitus in Jordan. *Diabetes, metabolic syndrome, and obesity: targets and therapy*, Vol(10), P.435-441.
- Chan, R. T., & Yap, M. (2016). Access barriers to eye care utilization among people with physical disability in Hong Kong. *Procedia Environmental Sciences*, Vol(36), P.46-49.
- Fenwick, E. K., Xie, J., Rees, G., Finger, R. P., & Lamoureux, E. L. (2013). Factors associated with knowledge of diabetes in patients with type 2 diabetes using the diabetes knowledge test validated with Rasch analysis. *PLoS one*, Vol.8 No.(12), P.e80593.
- Forster, A. S., Forbes, A., Dodhia, H., Connor, C., Du Chemin, A., Sivaprasad, S., . . . Gulliford, M. C. (2016). Changes in the detection of retinopathy in type 2 diabetes in the first 4 years of a population-based diabetic eye screening program: A retrospective cohort study (*Diabetes Care*, *Diabetes Care*, Vol.36 No (9), P. 2663-2669.
- Gravetter, F. Forzano, J., & Lori-Ann B. (2015). *Research Methods for the Behavioural Sciences* (4th ed.). Belmont, Calif., Wadsworth. p. 78.
- Hamzeh, A., Almhanni, G., Aljaber, Y., Alhasan, R., Alhasan, R., Alsamman, M., Haddeh, Y. (2019). Awareness of diabetes and diabetic retinopathy among a group of diabetic patients in main public hospitals in Damascus, Syria during the Syrian crisis. *BMC health services research*, Vol.19No.(549), P. 4375- 4378.
- Hegazi, R., El-Gamal, M., Abdel Hady, N. & Hamdy, O. (2015). Epidemiology of and Risk Factors for Type 2 Diabetes in Egypt. *Annals of Global Health*, Vol.81 No. (6), P. 814-820
- Huang, Hao; Yan, Peipei; Shan, Zhilei; Chen, Sijing; (2017). Risk factors of type 2 diabetes: A systematic review and meta-analysis. *Metabolism – Clinical and Experimental*. Vol. 64 No. (11), P. 1408–1418.
- International Diabetes Foundation. Diabetes. (2015). facts. <http://www.idf.org/about-diabetes/facts>. (Accessed December 1, 2015).
- Islam, F. M. A., Kawasaki, R., & Finger, R. P. (2018). Factors associated with participation in a diabetic retinopathy screening program in a rural district in Bangladesh. *diabetes research and clinical practice*, Vol.144, P. 111-117.
- Li, J. Q., Welchowski, T., Schmid, M., Letow, J., Wolpers, C., Pascual-Camps, I., Finger, R. P. (2020). Prevalence, incidence and future projection of diabetic eye disease in Europe: a systematic review and meta-analysis. *European Journal of Epidemiology*. Vol.35 No. (1): P. 11–23.

- Moskal, B.M., & Leydens, J.A. (2016). Scoring rubric development: Validity and reliability. *Practical Assessment, Research & Evaluation Journal of Engineering Education*. Vol. 91 No. (3), P. 351-354.
- Rahaman, K. S., Majdzadeh, R., Naieni, K. H., & Raza, O. (2017). Knowledge, attitude, and practices (KAP) regarding chronic complications of diabetes among patients with type 2 diabetes in Dhaka. *International journal of endocrinology and metabolism*, Vol .15 No(3).
- Rockefeller, C. (2016). Principal of teaching to the patient about causes, symptoms, and complications Tehran, Saleminashr; p. 9-11.
- Saedi, E., Gheini, M.R., Faiz, F. & Arami, M.A. (2016). Complications of diabetes mellitus. *World Journal of Diabetes*. Vol. 7, No. (17): P. 412–22.
- Shetgar, A., Patil, B., Salagar, M. & Nanditha, A .(2015). Assessment of awareness of diabetic retinopathy among diabetics: A Clinical Survey. *Indian Journal of Clinical and Experimental Ophthalmology*, Vol.1 No. (4), P. 260-263
- Srinivasan, N.K., John, D., Rebekah, G., Kujur, E., Paul, P., & John, S.(2017). Diabetes and Diabetic Retinopathy: Knowledge, Attitude, Practice (Kap) among Diabetic Patients in A Tertiary Eye Care Centre. *Journal of Clinical and Diagnostic Research*. Vol.11 No. (7) P. 1-7.

الملخص العربي

تأثير البرنامج التعليمي استنادا إلى نموذج (باسنيف) للعناية بالعين في مرضى السكري غير المعتمد على الأنسولين (النوع الثاني)

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تناولت هذه الدراسة تقييم سلوك العناية بالعين بين مرضى السكري غير المعتمدين على الأنسولين. وتم تجميع عدد 60 من المرضى من الذكور والإناث الذين تتراوح أعمارهم بين 40-60 عامًا والذين يعانون من مرض السكري لأكثر من 5 سنوات وان يكونوا معرضون لخطر مضاعفات العين التي تم إثباتها من خلال الفحص السريري وتشخيص الطبيب. وقد أظهرت النتائج أن 100% من المرضى لا يخضعون للفحص المنتظم، وان (3.3%) فقط لديهم مستوى جيد من المعلومات التي تخص سلوكيات العناية بالعين. ولقد ثبت أن سلوك العناية بالعين بين مرضى السكري غير المعتمدين على الأنسولين غير مناسب. لذلك يوصي بتطوير التدخلات التمريضية التي يمكن أن تعزز / تحسن رعاية العين لدى مرضى السكري غير المعتمدين على الأنسولين وخاصة عن طريق استخدام نموذج الرعاية الذاتية لمرضى السكري لمنع مضاعفات العين.

الكلمات المفتاحية

سلوك العناية بالعين، مرضى السكري غير المعتمدين على الأنسولين