Ministry of Health and Family Welfare

2017

सत्यमेव जयते

Short Term Training Curriculum Handbook

DIABETES EDUCATOR

Standards in accordance with
The National Skills Qualifications Framework (NSQF)

Ministry of Skill Development and Entrepreneurship

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Contents

INTRODUCTION TO THE SKILLS BASED TRAINING CURRICULA

The Skill based training courses are the training content developed for enhancing the specific skills of existing professionals or provide for a platform for imparting skills to candidates with no formal qualification.

To undertake the skill based training programme, it is mandatory that the candidate must fulfil the entry criteria provided for the job profile. The training and assessment will certify that the candidate is able to undertake specific set of activities. **These must not be equated with the formal qualifications- diploma/ degrees which are given by a University.**

It is recommended that the employer must help the candidate in continuing the studies to degree level and formal qualification, if the candidate is willing to gain knowledge and wants to move up the traditional career pathway.

Who is a Diabetes Educator

A Diabetes Educator (DE) is a health professional who possesses comprehensive knowledge of and experience in prediabetes, diabetes prevention, and management. DE are an integral part of the diabetes management teams. The DE educates and supports people affected by diabetes to understand and manage the condition. A DE promotes self-management to achieve individualized behavioral and treatment goals that optimize health outcomes. While diabetes educator may come from a variety of health professions, each member of the diabetic team is expected to integrate the role into their professional practice.

Scope of practice:

The course equips individuals with knowledge on the subject and intensive hands-on training thus providing the required experience, and bridging the gap between doctors and people with diabetes. This course opens new avenues of specialization for allied health professionals and would offer better work opportunities in the field. It will enable an individual to avail of jobs at government, community and private hospitals, community and private clinics, pharmaceutical and nutraceutical companies as a diabetes educator.

At the end of the course the candidate will have a certification of the skills attained and would be eligible to perform following activities *(Job description)*:

- Describe Diabetes, its various types and broad management plan
- Educate diabetic or pre diabetic patients, including warning signs and symptoms of various complications associated with diabetes viz. Retinopathy, Neuropathy, Nephropathy etc. and modes of their prevention
- Describe Medical Nutrition Therapy principles, calculation of BMI, BMR, calorific consumption and diet etc.
- Perform detailed evaluation of the patient as per clinical protocols set by the Endocrinologist (with whom attached or the institution where DE is employed)

- Apply the foot care assessments and procedures in areas such as wound etiology for the diabetic foot, wound care assessments, venous and neuropathic ulcer, infection, inflammation control and moisture control.
- Classify and apply staging system for the diabetic foot ulcer
- Recognize how sensory motor autonomic neuropathy affects development of a diabetic ulcer.
- Perform foot care for the patients including saline dressings, trimming and removing of callus etc. (for nursing cadre/ professional with authority for minor surgical interventions).
- Practice infection control measures.
- Evaluate performance of the treatment plan in various situations.
- Undertake documentation, reporting and follow up activities of the patients in collaboration with the health team.
- Demonstrate Basic Life Support, Cardio Pulmonary Resuscitation and other actions in event of medical and facility emergencies.
- Work in close collaboration with the health team, patient and their relatives for the better results and treatment of the patients.
- Demonstrate professional behavior, personal qualities and characteristics of a Diabetes Educator.
- Apply principles of patient rights in a various simulated situations.
- Discuss the expanding clinical role of Diabetes Educator, population based screening and preventive care.

Minimum Entry requirement

The course is intended to be an "upskilling certification" for the professionals with experience in the patient care such as graduates in Public Health, Nutrition, Nursing, Pharmacology, Occupational and Physiotherapy etc.

These healthcare professionals need to have a sound clinical understanding of the condition if they are to provide high quality diabetes education. Thus, diabetes education delivered by well-trained healthcare professionals becomes integrated with clinical care, forming the key to successful self-management on the part of person with diabetes.

Minimum Course duration

It is recommended that any programme developed from this curriculum should have a minimum of the **500 hours duration to qualify as an entry level professional in the field of diabetes educator**. This includes 100 hours of theory, 100 hours of practical/ skill and 300 hours of internship based training provided to the candidates.

Teaching faculty and infrastructure

Diabetes educator's modules should be taught by experienced diabetes educators from different professions, such as Endocrinologist, a Doctor, Nurse, Dietician or Pharmacist, with at minimum two years' of experience of teaching/diabetes counselling.

Classrooms should be equipped with the following arrangements: interactive lectures, brain storming, charts and models, activity video presentations. The skill lab need to be equipped with equipments so as to enable practical demonstration of various functions, role play, case studies etc.

Medium of instruction:

English/ regional language shall be the medium of instruction for all the subjects of study and for examination of the course.

Attendance:

A candidate has to secure minimum 80% attendance in overall with at least-

1. 75% attendance in theoretical
2. 90% in Skills training (practical) for qualifying to appear for the final examination.

No relaxation, whatsoever, will be permissible to this rule under any ground including indisposition etc.

TRAINING CURRICULA FOR SKILL CERTIFICATION

MODULE – 1: INTRODUCTORY/ FOUNDATION MODULE

Learning Outcomes: At the completion of this module, the participant should be able to-

1. Understand the healthcare scenario in India
2. Understand the basics of Diabetes, community processes and approaches
3. Describe the mentorship role and its importance in the development of new educators
4. Discuss the expanding clinical role, as well as the advanced practice roles of diabetes educators
5. Discuss the importance of continuous professional and self-development and methods of updating skills and knowledge in the field
6. Discuss methods of collaboration with the interdisciplinary healthcare team
7. Discuss the issue of recognition or certification of diabetes educator in the country
8. Discuss why an interdisciplinary and/or a multidisciplinary approach is needed in the management of diabetes
9. Identify the roles of various members working within an interdisciplinary team – such as generalist doctors, specialist doctors, nursing personnel, podiatrists, dietitians and psychologists
10. Identify ways in which the roles of different team members can overlap and complement each other
11. Have a basic working knowledge of computers
12. Understand the importance of and process of first aid and triage
13. Understand his/her role in disaster preparedness and management

Content -

S. No.	Topics	Hours		
		Theory	Practical	Total
1.	Introduction to healthcare and hospitals	3	2	5
2.	Roles and Responsibilities of Diabetes educator	2	2	4
3.	Basics of Diabetes	5	1	6
4.	Psychosocial and behavioral approaches	3	4	7
5.	Community awareness, promotion and prevention	6	6	12
6.	Research	2	4	6
7.	Professionalism and Values	2	1	3
8.	Communication	3	2	5
9.	Interpersonal skills and working with others	2	3	5
10.	Computers and information technology	2	8	10
11.	Basics of emergency care and life support skills	2	13	15
12.	Disaster preparedness and management	2	3	5
TOTAL		**34**	**49**	**83**

Detail of Topics

1. **Introduction to healthcare and hospitals**
    a. Healthcare delivery system in India at primary, secondary and tertiary care
    b. Community participation in healthcare delivery system
    c. Issues in Health Care Delivery System in India
    d. Health scenario of India- past, present and future
    e. Basic medical terminology

2. **Roles and Responsibilities of Diabetes educator**

    This module aims to provide participants with the opportunity to consolidate their understanding of the social, educational, and psychological requirements of people with diabetes and how these are to be met by using an interdisciplinary approach to care. The module also emphasizes the importance of providing ongoing education in diabetes care for all team members, and establishing common protocols and management goals.

    a. Functions of a diabetes educator
    b. Responsibilities of diabetes educators and their roles w.r.t. other health care members, methods of collaboration with the interdisciplinary healthcare team
    c. Expanding clinical role, as well as the advanced practice roles of diabetes educators
    d. Identification of the ongoing educational needs of team members in order to enable them to function in an interdisciplinary environment at their best capacity, and to allow them to contribute to team initiatives
    e. Need for common protocol to ensure all members of the team towards the same goal and use a common framework to avoid confusion for people with diabetes, duplicating care or miscommunication.

3. **Basics of Diabetes**
    a. Classification, diagnosis and presentation of diabetes (only introductory, to be dealt with later in dedicated module)
    b. Regulation of blood glucose in humans – discussing the mechanism of blood glucose absorption, storage and regulation in the body
    c. Role of pancreas in the blood glucose mechanism
    d. Glycemic Index and relation to food items
    e. Epidemiology of diabetes

4. **Psychosocial and behavioral approaches**
    a. Learning to perform diabetes self-care activities and integrate these health behaviour in daily life, in the face of other responsibilities and life stresses
    b. Impact of diabetes, and the psychosocial needs of people with diabetes and their family
    c. Encompassing behavioural approaches, and emotional support in self-management education

5. **Community awareness, promotion and prevention**
    a. Understanding of the community's knowledge and attitudes towards diabetes
    b. Development of community strategies that reflect the differences between type 1 diabetes and type 2 diabetes
    c. Strategies for health promotion and the primary prevention of type 2 diabetes
    d. Interpretation of India-specific surveillance data on the prevalence of diabetes and risk factors for the development of diabetes in the community
    e. Role of advocacy and communication skills in influencing policy making
    f. Role of exercises, weight management and dietetics in prevention of diabetes and its complications
    g. Associated illnesses like HIV/AIDS and Tuberculosis, their identification and management

6. **Research**
    The purpose of this module is to introduce research as a core component of the role of the diabetes educator. Though the candidates may not be formally involved in conducting research, he/she will need specific skills to be able to assess research papers and use new information to his/her practice. The course will include:
    a. Major research methods- qualitative, quantitative and quality management/audit.
    b. Interpretation of the latest statistical results
    c. Ethical issues in research including informed consent
    d. Current research in diabetes prevention and management involving new technologies and therapies

7. **Professionalism and Values**
    a. Code of conduct, professional accountability and responsibility, misconduct
    b. Ethics in healthcare – Privacy, confidentiality, consent, medico legal aspects
    c. Understanding scope of work and avoiding scope creep
    d. Handling objections
    e. Gather information from observation, experience and reasoning
    f. Identification of rapidly changing situations and adapt accordingly
    g. Planning and organization of work

8. **Communication**
    a. Special characteristics of health communication
    b. How to be a good communicator
        i. Addressing the patient
        ii. Body language, posture and gestures
    c. Barriers of communication & how to overcome them
    d. Listening and Speaking skills
        i. How to be a good listener
        ii. Structure brief and logical messages
        iii. Speak clearly and slowly in a gentle tone
        iv. Use the correct combination of verbal and non-verbal communication
        v. Use language familiar to the listener

vi. Give facts and avoid opinions unless asked for
vii. Communicating with patient with impaired hearing/ vision/ speech/ memory

e. Recognizing changes in the patient- behavior/ abnormal signs and reporting to the Medical Officer/ Officer in charge
f. Dealing with anger or depression of the patient

9. Interpersonal skills and working with others

a. Goal setting, team building, team work, time management,
b. Thinking and reasoning, problem solving
c. Need for customer service and service excellence in medical care
d. Communication with various stakeholders
    i. Handling effective communication with patients & family
    ii. Handling effective communication with peers/colleagues using medical terminology in communication
    iii. Telephone and email etiquettes
e. Manage work to meet requirements
    i. Time management
    ii. Work management and prioritization

10. Computers and information technology

a. Use of computers, its input and output devices
b. Use of basic software such as MS Office, operating systems (Windows) and internet
c. Use of data –
    i. Entry, saving and retrieving
    ii. Scanning and copying medical records/documents
    iii. Efficient file naming and uploading
    iv. Printing, as needed
d. Application of Computers in clinical settings

11. Basics of emergency care and life support skills

a. Vital signs
b. Basic emergency care – first aid and triage
c. Identifying signs and taking measures for
    i. Choking and Heimlich Maneuver
    ii. Bleeding including nosebleeds
    iii. Minor burns
    iv. Hypothermia
    v. Asthma attack
    vi. Bites and stings
    vii. Fainting
    viii. Sprain
d. Ventilations including use of bag-valve-masks (BVMs)
e. One- and Two-rescuer CPR

f. Using an AED (Automated external defibrillator).
g. Managing an emergency including moving a patient – log transfer
h. Infection control and prevention

12. **Disaster preparedness and management**
    a. Fundamentals of emergency management
    b. Preparedness and risk reduction
    c. Incident command and institutional mechanisms
    d. Resource management

Equipment required/ teaching strategies for the above content- Teaching through E-modules, writing reflective papers by the candidates, case studies, group discussions, clinical placements within an inter disciplinary team, role play to demonstrate the different behavior and approaches of team members.

Assessment –

S. No.	Assessment Criteria for the Assessable Outcomes	Marks Allocation		Total Marks Allocation
		Viva/ Theory	Skills Practical	
1.	Explain the role of a diabetes educator	10	0	10
2.	Describe the ethical considerations of his/her job as a diabetes educator	10	0	10
3.	Describe the need for customer service and service excellence in Medical service	5	0	5
4.	Describe the blended and overlapping nature of roles in a fully integrated team for diabetes management	5	0	5
5.	Discuss the role of advocacy and communication skills in influencing policy making for diabetes	5	0	5
6.	Discuss the major research methods and their application	5	5	10
7.	Describe and demonstrate how to communicate with patient with impaired hearing/ vision/ speech/ memory	5	25	30
8.	Enumerate the changes in the patient with abnormal behavior	5	0	5
9.	Identify the various contents of First Aid Kit	0	20	20
10.	Demonstrate Heimlich Maneuver	0	10	10
11.	Demonstrate the immediate action to be taken for a patient with nosebleed/ minor burns/ asthma attack/fainting/ sprain/ hypothermia/ bites – bee sting or snake bite	0	30	30
12.	Explain the importance of treating confidential information correctly	10	0	10
13.	Demonstrate basic first aid and CPR	0	30	30
14.	Describe precautions in the event of a disaster	5	5	10
15.	Demonstrate the basic use of computers and aspects related to data handling	0	10	10
Total		**65**	**135**	**200**

MODULE – 2: PLANNING AND SETTING GOALS, IMPLEMENTING AND EVALUATING TREATMENT PLANS FOR DIABETIC AND PRE-DIABETIC PATIENTS

Learning Outcomes: At the completion of this module, the student should be able to:

1. Understand normal pathophysiology and the defects that lead to abnormal glucose metabolism
2. Have a sound knowledge of the different metabolic disorders of glucose metabolism, their pathogenesis, their clinical characteristics and diagnostic criteria
3. Understand the different types of evaluation and when they are best used
4. Discuss the concept of continuous quality improvement (CQI), how measures can be integrated into day-to-day practice and the benefits to be derived
5. Describe various investigations methods for the diagnosis of diabetes
6. Describe the importance of monitoring the fasting and post prandial blood sugar
7. Develop an understanding of the need to advocate on behalf of young people with diabetes to reduce discrimination against them in school, the workplace and their daily lives
8. Describe pathophysiology of gestational diabetes
9. Describe pathophysiology of Type 2 diabetes

Content -

S. No.	Topics	Hours		
		Theory	Practical	Total
1.	Diagnosis, classification and presentation of diabetes	6	3	9
2.	Pathophysiology of diabetes	5	3	8
3.	Blood glucose lowering agents, hypoglycemia and its management	5	3	8
4.	Self-management of diabetes	3	2	5
5.	Treatment plan for type-I diabetes	4	4	8
6.	Treatment plan for type-II diabetes	10	4	14
7.	Treatment plan for gestational diabetes	4	4	8
TOTAL		**37**	**23**	**60**

Detail of Topics

1. **Diagnosis, classification and presentation of diabetes**
   a. Diabetes mellitus and use of glucometer
   b. Disorders of glycaemia: impaired glucose tolerance and impaired fasting glucose
   c. Type-I, Type-II and other specific types of diabetes and difference between them in their clinical presentation
   d. Investigation used for diagnosis of various types of diabetes

2. **Pathophysiology of diabetes**
   a. Structure and function of key organs, such as the pancreas, liver, muscle, adipose tissue, kidney, etc.

b. Relationship between blood glucose and insulin in healthy people including gluconeogenesis, glycogenolysis, lipolysis and ketogenesis
c. Incretin system and its importance in glucose regulation
d. Insulin – synthesis, action, effects, deficiency of insulin and its effect on lipid, carbohydrate and protein metabolism
e. Insulin resistance

3. Blood glucose lowering agents, hypoglycemia and its management

a. Types of blood glucose- lowering agents and their effect in Type-II diabetes
b. How and when to use different agents
c. Precautions and specific contraindications to the use of each type of agent
d. Define hypoglycemia, various signs and symptoms of hypoglycemia
e. Preventive management of hypoglycemia

4. Self-management of diabetes

a. Concept of nutrition, nutrients and calories
b. Barriers to self-care, including psychosocial concerns and issues
c. Evaluation of people's self-management skills and the outcomes of self-management

5. Treatment plan for type-I diabetes

a. Basic and advance diabetes self-management skills for treating Type-I diabetes
b. Side effects associated with the use of oral drugs
c. Importance of exercise and physical activities required in the management of Type-I diabetes
d. Importance of cold chain management to keep injectable insulin's, timely changes of needles for injections and right technique of injection
e. Insulin dose adjustment
f. Insulin syringe, pen needles and lancet disposal
g. Insulin pump and Continuous Blood Glucose Monitor handling

6. Treatment plan for type-II diabetes

a. Basic and advance diabetes self-management skills for treating Type-II diabetes
b. Drugs for treating Type-II diabetes
c. Importance of exercise and physical activities required in the management of Type-II diabetes

7. Treatment plan for gestational diabetes

a. Definition of gestational diabetes and recognition of its diagnostic criteria
b. Pathophysiology of gestational diabetes
c. Basic and advanced diabetes self-management skills for treating gestational diabetes
d. Management plan according to specific conditions such as obstetrics, diabetes control and culture
e. Nutrition and its role

Equipment required-

E- modules, glucometer, lancets, strips, gauge, tourniquet, sample coll, tubes, insulin types like HIR,IN etc., pen insulin etc., insulin giving techniques, mannequins, doctors sample orders, types of insulin, insulin assessing kit, chart presentations, charts and posters for group discussions, visit to healthcare centers, clinical postings

Assessment -

S. No.	Assessment Criteria for the Assessable Outcomes	Marks Allocation		Total Marks Allocation
		Viva/ Theory	Skills Practical	
1.	Describe Type-I, Type-II and other specific types of diabetes and identify difference between them in their clinical presentation	25	25	50
2.	Describe the relationship between blood glucose and insulin in healthy people including gluconeogenesis, glycogenolysis, lipolysis and ketogenesis	20	0	20
3.	Identify various blood glucose lowering agents and describe the precautions and specific contraindications to the use of various types of blood glucose-lowering agents	25	25	50
4.	Describe barriers to self-care, including psychosocial concerns and issues	20	0	20
5.	Describe the importance of exercise and physical activities required in the management of Type-I and Type-II diabetes	20	0	20
6.	Enlist how to recognize diagnostic criteria for gestational diabetes	10	20	30
7.	Describe nutrition and its role in gestational diabetes	10	0	10
Total		**130**	**70**	**200**

MODULE – 3: SHORT TERM AND CHRONIC COMPLICATIONS ASSOCIATED WITH DIABETES

Learning Outcomes: At the completion of this module, the participant should be able to:

1. Understand hypoglycemia and hyperglycemia, the consequences and the need to assist the person with diabetes to implement strategies to prevent their occurrence
2. State the causes of hypoglycemia, recognizing that in many cases the causes cannot be identified
3. Discuss preventive strategies for hypoglycemia, including individual nutritional and physical exercise management
4. Discuss the increased risk of hyperglycemia after an episode of severe hypoglycemia
5. Discuss the cause, risk, signs and symptoms and management of nocturnal hypoglycemia
6. State the causes, symptoms and preventive strategies for Diabetic Keto-Acidosis
7. State the causes, symptoms and preventive strategies for Hyperosmolar hyperglycemic state (HHS)
8. Recognize and manage home emergencies

Content -

S. No.	Topics	Hours		
		Theory	Practical	Total
1.	Short term complications	3	2	5
2.	Long term complications	2	3	5
3.	Diabetic retinopathy	2	3	5
4.	Diabetic neuropathy	3	3	6
5.	Diabetic nephropathy	3	3	6
6.	Macro vascular diseases	2	2	4
7.	Sleep disorder	2	1	3
8.	Oral health and diabetes	2	1	3
	TOTAL	**19**	**18**	**37**

Detail of Topics

1. **Short term complications**
    a. Hypoglycemia and hyperglycemia
    b. Causes of Hypoglycemia and hyperglycemia
    c. Signs and symptoms of hypoglycemia, management protocols for hypoglycemia based on blood sugar levels
    d. Difference between adrenergic and neuroglycopenic signs and symptoms
    e. Causes of hyperglycemia
    f. Sick day rules for Type I Diabetes Mellitus and ketone testing
    g. Results of hyperglycemia- Diabetic ketoacidosis, Hyperosmolar hyperglycemic state
    h. Management of home emergencies

2. **Long term complications**
    a. Screening of cases
    b. Monitoring and treatment of long term cases
    c. Complications of long term effects

3. **Diabetic retinopathy**
    a. Anatomy of the eye
    b. Epidemiology of diabetic retinopathy, including rates of incidence and prevalence
    c. Predictors of the development of retinopathy and the natural history of the disease
    d. Effect on vision of all stages of retinopathy
    e. Management of retinopathy during pregnancy
    f. Different grades of retinopathy and the characteristic clinical features of each grade
    g. Current intravitreal medical treatments for retinopathy

4. **Diabetic neuropathy**
    a. Signs and symptoms of diabetic peripheral neuropathy
    b. Impact of autonomic neuropathy on various organs
    c. Role and function of the sensory and motor nerves
    d. Features of painful diabetic neuropathy, its differentiation with other causes of peripheral pain
    e. Metabolic and structural abnormalities that occur in diabetic peripheral neuropathy
    f. Diabetic foot- effect of diabetes on blood vessels, nerves and joints, risk factors
    g. Assessment of foot problems and preventive actions
    h. Foot care, foot wear education and clinical management – Ulcer grading and management, debridement of ulcers (by nurse professionals), callosity and corn removal, foot orthotics and foot wears (including moulded shoes, soles and aircast, silicon insoles, bunion caps, toe separators and metatarsal bars for other foot problems)

5. **Diabetic nephropathy**
    a. Epidemiology of diabetic nephropathy including rates of incidence and prevalence
    b. Predictors of the development of nephropathy and the natural history of the disease
    c. Various levels of renal involvement, including hyper filtration, micro- and macro albuminuria, chronic kidney disease
    d. Diagnostic tests used in screening for kidney disease
    e. Microalbuminuria- transient nature, marker for vascular diseases
    f. Hypertension and the progression of kidney disease in diabetes
    g. Chronic kidney disease and kidney transplant

6. **Macro vascular diseases**
    a. Varied manifestations of macro vascular disease between different ethnic groups
    b. Silent ischemia, angina, transient ischemia attacks (TIAs), claudication and resting pain
    c. Central obesity as a marker for increased vascular risk
    d. Risk factors and the additive effects of multiple risk factors
    e. Management of dyslipidaemia and hypertension
    f. Clinical trials that give some evidence for the treatment of macro vascular risk

7. **Sleep disorder**
    a. Understand the significance of being overweight and the risk of sleep apnea
    b. Significance of sleep apnea for risk factors for heart disease
    c. Effect of oxygen and carbon-dioxide on the chronic obstructive pulmonary disease
    d. Relationship between sleep apnoea and diabetes

8. **Oral health and diabetes**
    a. Increased risk of dental caries in people with diabetes
    b. Define xerostomia, its occurrence, and its consequences
    c. Lichen planus and its consequences
    d. Gum diseases, such as gingivitis and periodontitis, their causes, treatment and consequences

Equipments used: Lectures, experimental learning techniques, visits to the eye clinics, practical demonstration and group participation for clinical assessment of neuropathy, Visit multidisciplinary foot clinic, Problem-based learning involving case studies

Assessment -

S. No.	Assessment Criteria for the Assessable Outcomes	Marks Allocation		Total Marks Allocation
		Viva/ Theory	Skills Practical	
1.	State the signs and symptoms of hypoglycemia	5	25	30
2.	Discuss the treatment of mild and severe hypoglycemia	5	25	30
3.	Discuss the treatment for DKA (Diabetic ketoacidosis)	5	25	30
4.	Discuss the treatment for HHS	5	25	30
5.	Identify assessment techniques for foot problems	0	25	25
6.	Identify various foot wears and enumerate their importance	10	20	30
7.	Indicate steps for screening cases for Diabetes	0	25	25
Total		**30**	**170**	**200**

MODULE – 4: PROFESSIONAL CONDUCT, COUNSELLING AND COMMUNICATION SKILLS

Learning Outcomes: At the completion of this module, the participant should be able to:

1. Describe the importance of creating awareness regarding diabetes and counseling patients
2. Describe the importance of handling stressful situations or risky situations while talking to patients and relatives
3. Understand uses and importance of various records in healthcare set up & how to obtain information from them at the time of follow up or research activities
4. Explain the feedback mechanisms from appropriate people like the concerned medical team, care-givers and relatives

Content -

S. No.	Topics	Hours		
		Theory	Practical	Total
1.	Counselling of Diabetic and pre-diabetic patients	6	5	11
2.	Patients' rights, consent, observing, recording and documentation	4	5	9
	TOTAL	**10**	**10**	**20**

Detail of Topics

1. **Counselling of Diabetic and pre-diabetic patients**
    a. Counseling regarding disease, lifestyle modification including dietary control and physical activity, medications, complications and self-monitoring
    b. Pre-gestational counselling of women with pre-existing diabetes mellitus
    c. Foot care (including use of orthopedic shoe), dental care and self-management
    d. Importance of keeping records of blood sugar levels by patient or their care-givers.
    e. Addressing the psychosocial needs of the people with diabetes and their family.
    f. Importance of adherence to treatment protocol for diabetes patients.
    g. Routine checkup in high risks patients
    h. Travel guidelines

2. **Patients' right, consent, observing, recording and documentation**
    a. Rights of a patient in the healthcare setting
    b. The role of diabetes educator in maintaining and preserving the patient's rights
    c. Observing and reporting of accurate condition of the patient
    d. Feedback mechanism and coordination with medical team

Equipments required: e-modules, visit to healthcare settings, sample consent forms, formats, group discussions, case description, interviews and role play.

Assessment -

S. No.	Assessment Criteria for the Assessable Outcomes	Marks Allocation		Total Marks Allocation
		Viva/ Theory	Skills Practical	
1.	Explain the importance of observing and reporting the patient condition and demonstrate how to take consent while assisting the patient	10	30	40
2.	Demonstrate how to counsel a patient/care-giver (ensure points for disease related information, lifestyle modification including dietary control and physical activity, medications, complications and self-monitoring)	0	50	50
3.	Enumerate patient rights	10	0	10
Total		**20**	**80**	**100**

FINAL EVALUATION

Apart from a final assessment at the end of the modules which includes theory and skill assessment, a combination of various evaluation activities to test the candidates at the end of every module can be adopted. They can be presentation, role play, group discussions, critique of a published piece of research, case studies, assignments after modules, quiz etc. However it is to be noted that a completion certificate will only be issued after the candidate has passed both theory ad skill based raining exams separately.

EQUIPMENT LIST

1. Bed with mattress
2. Patient Side Locker
3. Back Rest
4. Foot Step
5. Cardiac Table
6. Bed Sheet, Blanket, Pillow with Pillow Cover
7. I V Set-up
8. Oxygen Cylinder with Connector, Key, Face Mask and tubing
9. Tourniquet
10. Enamel Basin
11. Rubber Sheet 2 x 2 Mts (2 sets)
12. Tongue depressor (2)
13. Foot Care set up (2)
14. Eye Care set up (2)
15. Alcohol swabs (1 bowl)
16. Blood glucose monitors (2)
17. Blood glucose test strips (5)
18. Control solutions
19. Test tubes (3)
20. Insulin Pens (2)
21. Lancets (2)
22. Urine test cans (2)
23. Urine Test Strips for Protein, Sugar, Ketones
24. Goggles (5)
25. Syringe with needle, sterile 1 cc or less, each (5)
26. Syringe with needle, sterile 2 cc, each (5)
27. Syringe with needle, sterile 3 cc, each (5)
28. Syringe with needle, sterile 5 cc or greater, each
29. Torch (3)
30. Glasses (3)
31. Mortar and Pestle (2)
32. Diabetes Socks
33. Shaving Kit
34. Infusion Pump (2)
35. Insulin Syringe with needles (5)
36. List of essential medicines (10)
37. Air Cushion
38. Sand Bag
39. Fire Extinguisher 5 KG ABC type
40. Weighing Machine
41. Oral care Set
42. Insulin Syringe Pump
43. Pre Filled Insulin
44. Vial Insulin (2)
45. Glucometer (2)
46. Glucose Strips (5)
47. Replacement battery (2)

48. Glucose drink or powder
49. Scissor (3)
50. Nail Cutter (5)
51. Nail Filer (5)
52. Steel Plate (2)
53. Steel Glass (5)
54. Steel Bowl (5)
55. Spoon (10)
56. Steel Jug (5)
57. Bath Tub
58. Measuring Glass
59. Sample Oral Medicine with clearly visible expiry, MFG other relevant details (10)
60. Sample Insulin with all the variations (HIR, HIN) etc (5)
61. Sample insulin available in vials and pre filled cans (5)
62. Full Body Mannequin - Basic
63. CPR Mannequin
64. Airway Mannequin (3)
65. Ambu Bag with Mask (Adult)
66. AED Trainer with Adult Pad
67. Male Multi Veno IV Arm
68. Advanced Male and Female Catheterization Kit
69. Wound care Model Anatomical
70. Sample forms & formats ( )
71. Gloves (disposable) - packet (5)
72. Gloves (surgical) - packet (5)
73. Liquid Soap Bottle (4)
74. Mask - packet (2)
75. Shoe Cover - packet (2)
76. Hair Cap - packet (2)
77. Mackintosh (4)
78. Sponge Cloth (4)
79. Wet Wipes - packet (4)
80. Comb (4)
81. Tooth Brush (4)
82. Toothpaste (2)
83. Hair Oil (2)
84. Shampoo Bottle (2)
85. Bath Soap (4)
86. Talcum powder (2)
87. Bio degradable Plastic Bags (Red, Blue, Black and Yellow 10 each) with dustbins
88. Uro bag (4)
89. Sample Collection Bottle (10)
90. Gauze Piece (4X4) (10)
91. Betadine Solution Bottle (2)
92. Cotton Rolls (2)
93. Normal Saline Bottle (2)
94. Micropore (5)

95. Registers (attendance 2, record book 2,) Pens, Pencil Erasers, Sharpeners, Marker pens 10 each, charts paper, drawing board etc
96. Duster (2)
97. Paper (Ream of 500) (2)
98. Cleaning Solution (Colin) (2)
99. Syringe 50 cc/ml (5)
100. Flip charts on diabetes prevention & management (2)
101. Hot Water Bottle (3)
102. Ice caps (3)
103. Folley's catheter (2)
104. Ryle's tube (2)
105. Desktop, Intel Core I3, with 2 GB Ram, 500 GB Hard Disk with accessories with internet facility
106. T V Monitor 42 Inch LCD TV / LCD Projector
107. White Board
108. Extension Cord
109. Speakers 40 Watt set of two
110. Printer with Scan and copy function Wi-fi with economical printing

LIST OF ABBREVIATIONS

AED	Automated external defibrillator
AIDS	Auto Immune Deficiency Syndrome
BMW	Bio-medical waste
BVMs	bag-valve-masks
CPR	Cardio Pulmonary Resuscitation
DKA	Diabetic Ket-Acidosis
EHR	Electronic Health Records
EMR	Electronic Medical Records
HIV	Human Immunodeficiency Virus
IDDM	Insulin Dependent Diabetes Mellitus (Type-I)
MS	Microsoft
NIDDM	Non- Insulin Dependent Diabetes Mellitus (Type-II)
SST	Serum Separation Tubes
TB	Tuberculosis

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