RSSDI

Indian Diabetes

EDUCATOR JOURNAL

Theme of the Month

Diabetes and Relationships

To keep Members Diabetes Care team abreast about
DSME /DSMS - (Diabetes Self management Education / Support) Concepts

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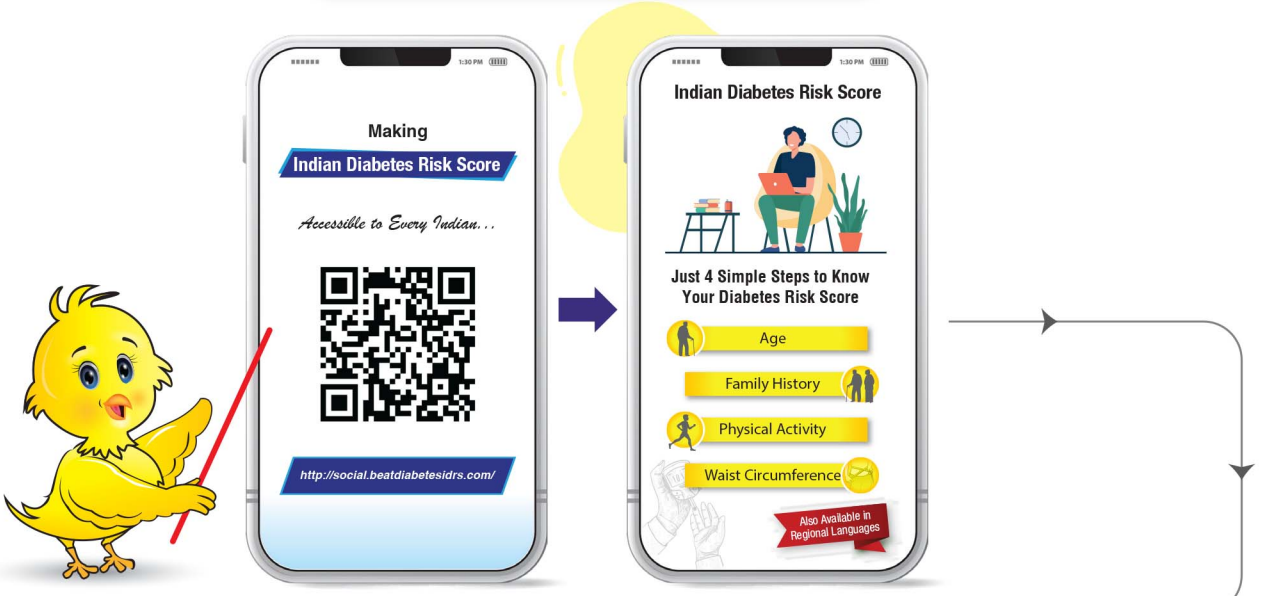

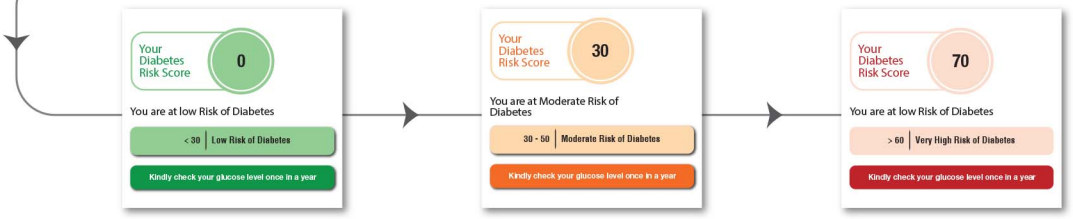

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To keep the members of diabetes care team abreast with DSME and DSMS concepts

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*DSME: Diabetes Self-Management Education, DSMS: Diabetes Self-Management Support

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RSSDI Indian Diabetes EDUCATOR JOURNAL

1 st time in India
To keep the members of diabetes care team abreast with DSME and DSMS concepts

FOREWORD

Research Society for the Study of Diabetes in India (RSSDI) founded by Prof MMS Ahuja in the year 1972 is the biggest scientific association of healthcare professionals involved in promoting diabetes education and research in India. RSSDI is happy to collaborate with USV to support their endeavour to make India the 'Diabetes care capital of the world'. Through this collaboration, RSSDI would like to strengthen the cadre of diabetes educators by empowering them with recent updates in diabetes management helping bridge the gap between the physician and the patient. Today, the rule of 50% is prevailing in terms of awareness, detection, treatment and control in T2DM.Our aspiration is to achieve 90-90-90-90 i.e.90% of people with diabetes should be made aware, 90% should be detected, 90% of those detected should be treated, and 90% of those treated should reach their goals.

Indian Diabetes Educator Journal (IDEJ) is the first of its kind in India, and the longest running monthly diabetes educator journal since April 2015 & continues its endeavour to spread awareness, knowledge and enable healthcare teams to manage individuals with diabetes and empower them for self-care. RSSDI IDEJ will continue to keep the members of diabetes care team abreast with concepts of Diabetes Self-Management Education/Support (DSME/S) with a reach of 44000 doctors and diabetes educators digitally.

Diabetes is a chronic condition and managing it can be challenging and can place a strain on relationships. This month's IDEJ aims to propagate information on how diabetes can affect relationships with family, friends, colleagues etc. and how diabetes educators play an important role in counselling the family and friends of people with diabetes about what to expect and how they can help them to manage the condition well.

We sincerely thank our contributors for making this issue delightful reading for our readers. We dedicate this journal to all the healthcare professionals who are working relentlessly towards making "India–The Diabetes Care Capital of the World."

Sincere Regards,

Dr. Sanjay Agarwal
RSSDI Secretary

*DSME: Diabetes Self-Management Education, DSMS: Diabetes Self-Management Support

Expert Contributors
of the month

Dr. Sandeep Suri

MBBS, MD (General Medicine), FIDM
Consulting Diabetologist, Holy Hospital, Hisar

Article: Diabetes and Marriage

Dr. Ramnath Raut

M.B.B.S, MD (Medicine)
Consulting Physician & Director, Sarvadnya Multispeciality Hospital, Pune

Article: Peer Relationship and Diabetes Mellitus

Dr. Atmaram V. Panikkassery

M.B.B.S, MD, MRCP, PGDHSc (Diabetology), MHSc (Diabetology)
Chief Physician and Diabetologist, Santhwana Eye and Diabetic Clinic, Kodungallur

Article: Intimate Partner Violence (IPV) and Incidence of Diabetes in Women

Dr. Ashish Goel

MBBS, PGD (Diabetes),
Consulting Diabetologist & Director, FAYTH clinic, Mumbai

Article: Effect of Hypoglycemia on Relationships

Dr. Nimish K. Patel

MBBS, MD Medicine, FICM
Consulting Physician & Diabetologist, Guru Ashish Clinic, Mumbai

Article: Workplace Support for Individuals with Diabetes

Dr. Harsha Pamnani

MBBS, MD Medicine (Gold Medalist), DNB Endocrinology
Consulting Endocrinologist, Siddhanta Red Cross Hospital, Bhopal

Article: Caring for Elderly Parents with Diabetes

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Dr. Sandeep Suri

MBBS, MD (General Medicine), FIDM

Consulting Diabetologist, Holy Hospital, Hisar

Diabetes and pre-diabetes are becoming increasingly common in India. Diabetes is a significant chronic illness that causes individuals, couples, and families to engage in intricate reciprocal interactions regarding the illness and other aspects of life. Diabetes mellitus necessitates considerable lifestyle adjustments and the adoption of self-care. It is frequently accompanied by treatment plans that must be followed for the rest of one's life. Diabetes complications can lead to impairment or even death, which has a significant impact on patients' and their families' quality of life. Marriage is one of the most difficult issues for people with diabetes, especially in developing nations like India, where the institution of marriage has its own set of complex and distinct social factors. In India, the majority of weddings are arranged, with family consent and social status playing a major role. Marriage rates amongst people with diabetes have been observed to be significantly lower in various communities.

Pre-marriage stage

Stigmatization is a social process in which a person or a group is devalued and discriminated against as a result of real or perceived differences. Several chronic conditions, such as obesity, diabetes, mental illness, epilepsy, sexually transmitted infections, and HIV/AIDS, have been linked to disease-related stigma. Since arrange marriage is a cultural practice in India, the bride and groom are usually matched by their parents based on shared hobbies, education, caste, and professional standing, and their marriage is arranged by the respective families if they eventually agree. Diagnosis of diabetes may make it more difficult for Indians with diabetes to find a soul mate, as families will prefer to marry 'healthy' people. The worry stems from the widespread belief that diabetes is always hereditary and also, the unaffected partner may be forced to live a restricted lifestyle, which is normally recommended for people with diabetes, such as following strict norms, particularly in terms of food and exercise. Apart from finding a soul mate, bridal dowry places a significant financial load on the bride's family, and the amount required can be higher if the woman has a chronic illness like diabetes which can hinder fertility.

Post marriage

The couple's relationship with diabetes is a unified set of feelings concerning diabetes and its management that the couple establishes. It can be either positive (transformative), neutral (accepting), or negative (destructive/ rejecting). It manifests cognitively (in terms of how to think, understand, and plan for diabetes), physically (in terms of how to manage self-care), emotionally (in terms of how to feel about living with diabetes), and socially (in terms of how to connect with others) (how to interact with each other around diabetes, as well as with other family members, friends, and medical professionals). It's dynamic and can change over time as a result of couples' continuing experiences with the disease, and it can either buffer or intensify reactions to those experiences. It may be a collaborative creation of meaning within the couple, or it could be detached, even conflictual.

Impact of diagnosis of diabetes on marriage

Theme	Sub-Theme	Example
Tip of the iceberg- Diagnosis of diabetes denotes the start of additional health problems for patients and spouses which is defined by spouses as the "tip of the iceberg"	Adherence to the drug therapy	Husband: "I have to take 5-6 pills a day." Wife: "I just wish he did not have to take all these medicines!"
	Diabetes comorbidities	"Starting with this, more problems occurred – cholesterol, high blood pressure and so on. It was getting worse and worse. [I had] lots of problems not specifically linked to diabetes."
	Diabetes Complications	He can't see because he had blood glucose values of 350 mg/dL for almost a year. He's got tough cataracts. He can't see at all.'"
Contradictory feelings	Positive Coping mechanisms	"We, as a family, live with the difficult condition of the illness and find the positive meaning in this."
	Anger, resignation and frustration	"I was mad at him because I was telling him for a while to see a doctor and he didn't want to. I was mad at myself because I didn't recognize his symptoms which could be so obvious."
	Fear of the future	"You can't heal diabetes, and when I think that the situation can only get worse, I'm scared."
	Diabetes Burden	"Insulin irritates me; I don't want to do it anymore. It is a pain. To control it is hard – it is annoying."

Theme	Sub-Theme	Example
Changes in daily living	Facing symptoms	"With diabetes, you always feel tired, it is chronic tiredness. You are never in the mood for anything. I was doing only sofa–bed, bed–sofa. It was out of the discussion to go out for a walk."
	Mood swings	"You must inject the insulin, wherever you are, you have to do it. You have to carry it everywhere!"
	Therapy cage	
	Healthy Nutrition	"What I eat, she also eats." "We've all changed our diet! Now, the new diet has become our lifestyle."
An amplifier of relational dynamics	Quarrels and Conflicts	"We first quarrelled, and now we argue!"
	Relationship breakup	"I refuse to get her stuff ready, to make her food..."
	Deepening of the union	"We complete each other… Maybe diabetes united us."
	Solidarity of the couple	"She too sacrifices and eats like me".

A study conducted by Mishra S et al., to evaluate problems in pre and post-marital type 1 adults in India, found that 20% of males and 30% of females in the unmarried group denied marrying, 40% of males and 70% of females who accepted to get married preferred arrange marriage, 4 out of 10 males and 7 out of 17 females amongst married group felt that they should not have married due to certain reasons, 5 out of 10 males and 7 out of 17 females faced rejections and are leading a difficult life post marriage. Amongst the married group, the biggest challenge in marriage is their diabetes and lifelong treatment with injectable, 3 out of 7 females who married partners without diabetes have compromised at many levels like financial status, or some other chronic disease like rheumatoid arthritis, age difference and second marriage, 2 couples did not agree for children as they were afraid of having offspring with type 1 diabetes mellitus.

Health of offspring

One of the main concerns among people with diabetes about marriage is the belief that diabetes is genetic, and that there is a high chance that their children would have diabetes as well. There's also a higher chance of congenital abnormalities and poor fetal and neonatal outcomes. In siblings, parents, and offspring of people with diabetes, the overall risk of acquiring diabetes ranges from 1% to 15%, compared to 1.2/1000 in the general population. However, this risk is low, with 85% of type 1 diabetes diagnoses occurring in people who have no family history of the disease. A father with type 1 diabetes has a greater lifetime risk of type 1 diabetes in his offspring

(6%), compared to a mother with type 1 diabetes (1.3%). Furthermore, in the context of underlying genetic predisposition, environmental factors have a crucial influence on illness progression. Offspring of parents with type 1 diabetes have a reduced risk of developing type 1 diabetes than offspring of parents with type 2 diabetes (which is 15% when one parent has type 2 diabetes and 60%–75% when both parents have type 2 diabetes).

Supporting the spouse with diabetes

There are many things required for a good marriage and one of them is being each other's support system. Here are a few ways in which a partner can support the spouse with diabetes

- One must communicate to the partner about always being there with them to help and support anyway needed while still making them feel in control of their diabetes
- One must not pressurize or criticize the partner when it comes to diabetes management. Instead, they should set a good example by being disciplined themselves
- The partner must support by following a healthy lifestyle themselves so that they are exercise buddies and eat healthy together.
- The partner must be aware of and accept the mood swings that come along with blood glucose fluctuations. The focus must be on trying and getting the glucose in control.
- Two-way communication and expressing one's feelings always help to build a strong relationship. If either of the partners has withdrawn due to anxiety or depression, the other one must make it point to talk things out to find a solution.

Diabetes management is critical to a patient's success and outcomes and has a significant impact on a couple's everyday lives. The marriage connection can either be a source of support or a source of stress. As a result, individual and couple counseling prior to marriage is critical and should be stressed on a frequent basis. A successful marriage is built on the foundations of trust, understanding, support, and respect, and it proves to be a win-win situation in many aspects of life, including healthcare. The responsibility for the management of diabetes should be shared by both partners however the person with diabetes must be in control of their self-management with the spouse supporting in every way possible.

"Coming together is a beginning, keeping together is progress and working together is success."

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Frequently Asked Questions

1. My husband has Type 2 diabetes and I am 24 weeks pregnant. This is my first pregnancy and I am concerned about the baby. Will my child also get diabetes?

Ans: It is natural for parents with diabetes to be concerned about passing the condition on to their children. The lifetime risk of developing type 2 diabetes is 40% for individuals who have one parent with diabetes and 70% if both parents have diabetes. Type 2 diabetes is a result of interaction between the hereditary component and environmental factors like obesity, sedentary lifestyle, small or large birth weight and stress. Type 2 diabetes commonly occurs in children who watch and adopt unhealthy habits from their parents, such as having highly processed and refined foods and decreased physical activity. Yes, your child may be at risk for diabetes but the good news is that you can encourage your child to include healthy food choices right from an early age and exercise regularly which can help in preventing diabetes.

2. My elder brother has diabetes and we live in the same house. He was diagnosed in 2019 when he was 35 years old. From that time, he has completely stopped sweets and junk food and is exercising daily. Since he has diabetes, does this mean I will get it too? Do I have to stop having sweets and eliminate sugar and exercise like him?

Ans: Yes, there is a higher risk of diabetes if your brother is diagnosed with it. You could also have pre-diabetes which is a condition where b lood glucose levels are higher than normal but not high enough to be diagnosed as diabetes. But that being said, you can minimise the risk of diabetes or reverse pre-diabetes by taking care of your health. Check your weight and see if you are in the normal BMI category. If not, then try to achieve a desirable body weight by eating healthy and exercising regularly. Get in touch with a dietitian for a customised meal plan. In the case of diabetes, unhealthy food choices can add unwanted calories and raise blood glucose levels further causing more complications. Since your brother has diabetes, take it as a challenge to learn more and educate yourself on diabetes and its prevention. This practice can benefit both you and your brother too.

3. My long-term boyfriend now-turned fiancé is diagnosed with diabetes. I am concerned about our relationship. Do you think his health status can create problems in our marriage and in our ability to become parents?

Ans: Living with diabetes can be challenging but having a loving and caring partner makes it easier. As long as you educate yourself about his health condition and he monitors his blood glucose levels and responds appropriately a nd promptly, his diabetes should not be a barrier to marriage if you love him. Sometimes, people with diabetes may be unaware of the extent to which their condition affects others around them. It is worthwhile to share your feelings with your fiancé during events where you feel uneasy, so he can see how concerned and invested you are in his health journey. Well-controlled diabetes is no hurdle in terms of career or family life and you can both lead a normal good quality of life. If your fiancé is able to maintain his blood glucose levels in the target range and monitors regularly there will be no problem for you to conceive and have a normal baby.

4. My aunt is a 48-year-old lady and has diabetes for almost 7 years now. She lives with us and recently she is having terrible mood swings. This causes unnecessary fights in the house. We are not sure whether these mood changes are menopausal symptoms or due to diabetes. Is diabetes related to mood swings? Please advise on how I can help her.

Ans: Changes in mood could be due to menopause but are common in diabetes as well. Mood swings can occur in case of rapid changes in blood glucose levels. She may be irritable or sad when she experiences hypoglycaemia or when the blood glucose levels are high (>250mg/dl). These changes in mood are temporary and will cease when the blood glucose levels are back in the target range. You can help her by motivating her to check her blood glucose level frequently. Every time she has a mood swing, check her blood glucose level to see whether it is high or low and take corrective actions to bring it to the target range. Another reason for mood changes is diabetes-related distress. This comes from worry, concern, or stress associated with the daily routine of managing diabetes. If you think she is overwhelmed with diabetes management or is facing emotional issues, talk to her and help her bring out her feelings. You can take her to a mental health professional or counsellor if you think she needs professional help.

Peer Relationship and Diabetes Mellitus

Dr. Ramnath Raut

M.B.B.S, MD (Medicine)

Consulting Physician & Director, Sarvadnya Multispeciality Hospital, Pune

Diabetes management is one of the primary concerns affecting health systems and the economy around the world. Furthermore, due to the complexity of diabetes and its self-management, people with diabetes require ongoing emotional, behavioural, and social support. This helps to maintain self-care behaviour, reduce the risk of complications, and improve quality of life. Managing a chronic condition such as diabetes can be overwhelming, particularly for adolescents who are attempting to assert their independence from their families and form peer relationships. At this age, adolescents spend more time with their peers and have strong impulses to form intimate friendship groups. Friends are a significant source of emotional support for teenagers with diabetes, even though parents appear to be the predominant source of support for diabetes care. Peer and friend relationships play an important role during adolescence when self-care and glycaemic control become a challenge for people with type 1 diabetes.

Friends and peers can have a positive impact on teenagers' well-being and self-care by providing emotional support, such as making them feel loved, treating them the same as other peers, and having an empathetic approach rather than giving sympathy. Non-judgemental friends are what one needs. They should also be able to provide instrumental support, such as providing guidance or physical assistance when needed. Support from friends is associated with better metabolic control. Peer relationships are more supportive, as adolescents may disclose more to their friends about their diabetes and about how they feel. This disclosure leads friends to provide more emotional support and can have a positive effect on mental wellbeing. In general, studies show that females' peer relations are usually more supportive than those of boys.

On the other hand, friends might have a detrimental impact on one's well-being and self-care if they are a source of conflict. Children with type 1 diabetes may be at greater risk than their healthy peers for intimidation due to their associated disease management routines (e.g., frequent glucose monitoring, multiple insulin injections, dietary restrictions) that may be stigmatizing, making them potential targets of bullies. In many cases, children report being victims due to the needs/particularities that their diabetes management involves. Peers and teachers may label the child/adolescent as 'different'. They are perceived to be abnormal by the rest of the class and so they might not get included in the 'group' or may be victims of assault too. Children with type 1 diabetes are less able to cope with these situations, because they have feelings of inferiority, insecurity and alienation Conflict with friends may lead to worse self-care and glycaemic control. Conflict is also likely to be stressful for children/adolescents, reducing their ability to solve problems in self-care situations. Peer relationships have both positive and negative aspects on the psychological well-being and physical health of children/adolescents with diabetes. Therefore, knowledge of this relationship is vital for the follow-up of these patients and the implementation of preventive programs.

Diabetes peer support groups have been recommended to improve the physical and mental health of people with diabetes. This is essential because it encourages practical, social, and emotional support among members of the community who have diabetes. An individual can learn more about diabetes while also sharing their experiences and facts. Peer support integrated with diabetes self-management education and support effectively enhance glycaemic control in individuals with diabetes.

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Did You Know?

Married couples share the risk of developing diabetes mellitus

Type 2 diabetes is a major public health issue around the world. A family history of diabetes is an important factor in determining diabetes risk. Even though most spouses are genetically unrelated, studies have shown that spouses of people with diabetes are at a high risk for developing diabetes themselves. Behaviour, lifestyle factors and conducive environmental factors play an important role in the development of diabetes. These factors are shared by the married couple most of the time. Individuals while selecting partners tend to choose those with similar body composition, health norms and habits. Also, over the course of the marriage, they engage in similar activities, practices, and lifestyles. Thus if these environmental factors trigger the development of diabetes in one partner, the other also becomes at high risk due to the same environmental influences. A Danish study reported that based on the partner's BMI, one could predict the diabetes risk of the spouse. Higher the BMI, higher the risk of the spouse developing diabetes. This necessitates the fact that all the efforts to detect undiagnosed diabetes or pre-diabetes should focus on couples and households and not merely one individual.

Facts and Figures

As per a survey conducted by Delhi Diabetic Research Centre (DDRC) in 2005 on matrimonial problems faced by people with type 1 diabetes in India:

- 4 out of 9 married females with type 1 diabetes were sent back to their parent's house after a period of six months to one year of marriage.
- 2 females with diabetes lost interest in self-care and monitoring after being denied funds for treatment by in-laws.
- Marriage of 1 female working as an executive was cancelled at the last moment when one of the close relatives from the groom's family r aised an objection.
- 2 females with diabetes are happily married to a person without diabetes.
- 4 males with diabetes did not disclose their disease before marriage and got married.
- In 2 situations, families got their children (male with type 1 diabetes) married to another person with type 1 diabetes.
- 1 female without diabetes got married to a male with type 1 diabetes.
- 24 were still waiting for the right match.

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What's Trending? Intimate Partner Violence (IPV) and Incidence of Diabetes in Women

Dr. Atmaram V. Panikkassery

M.B.B.S, MD, MRCP, PGDHSc (Diabetology), MHSc (Diabetology)

Chief Physician and Diabetologist, Santhwana Eye and Diabetic Clinic, Kodungallur

Intimate partner violence (IPV) is abuse that happens in a romantic relationship. "Intimate partner" refers to both former and/or current spouses and dating partners. IPV may vary in how often it occurs and how severe it is. It may range from one single episode of violence having a lasting impact resulting in chronic issues to frequent episodes over multiple years. IPV can be of the following types:

Physical violence
is when a person hurts or tries to hurt a partner by hitting, kicking, or using another type of physical force.

Sexual violence
is forcing or attempting to force a partner to take part in a sexual act, sexual touching, or a non-physical sexual event (e.g., sexting) when the partner does not or cannot consent.

Stalking
is a pattern of repeated, unwanted attention and contact by a partner that causes fear or concern for one's own safety or the safety of someone close to the victim.

Psychological aggression
is the use of verbal and non-verbal communication with the intent to harm another partner mentally or emotionally and/or to exert control over another partner.

IPV is associated with health issues and economic consequences. Health issues include conditions involving digestive, reproductive, heart, muscle, bones, and nervous systems. IPV survivors may also experience mental health issues like depression and posttraumatic stress disorder (PTSD). These individuals are also at greater risk of engaging in binge drinking, smoking, and sexual risk behaviors.

IPV-induced depression and/or stress can lead to the development of insulin resistance. Insulin resistance development is followed by progression to type 2 diabetes mellitus (T2DM) and in the case of pregnant women increased risk of gestational diabetes mellitus.

Gestational Diabetes Mellitus (GDM)

IPV is associated with both maternal and fetal morbidity as well as mortality. This could be either through direct effects on pregnancy or via indirectly affecting the maternal biological pathways. IPV related mental health consequences such as stress/depression induces dysregulation of the HPA axis, leading to the hypersecretion of cortisol and insulin resistance. This insult may exacerbate the normal pregnancy insulin-resistant state as shown in Fig.1, i.e., decreased insulin sensitivity and increased oxidation in skeletal muscle, liver and adipose tissue. In addition, there is increased gluconeogenesis (glucose synthesis) in the liver and lipolysis (increased triglycerides) in adipose tissue. These changes further increase glucose levels, causing an additional burden on

pancreatic β-cells for insulin production, in due course the capacity to compensate is reduced, leading to GDM. The collective effects of insulin resistance related to pregnancy and IPV synergistically may increase GDM risk. Thus, IPV is a potential risk factor for GDM.

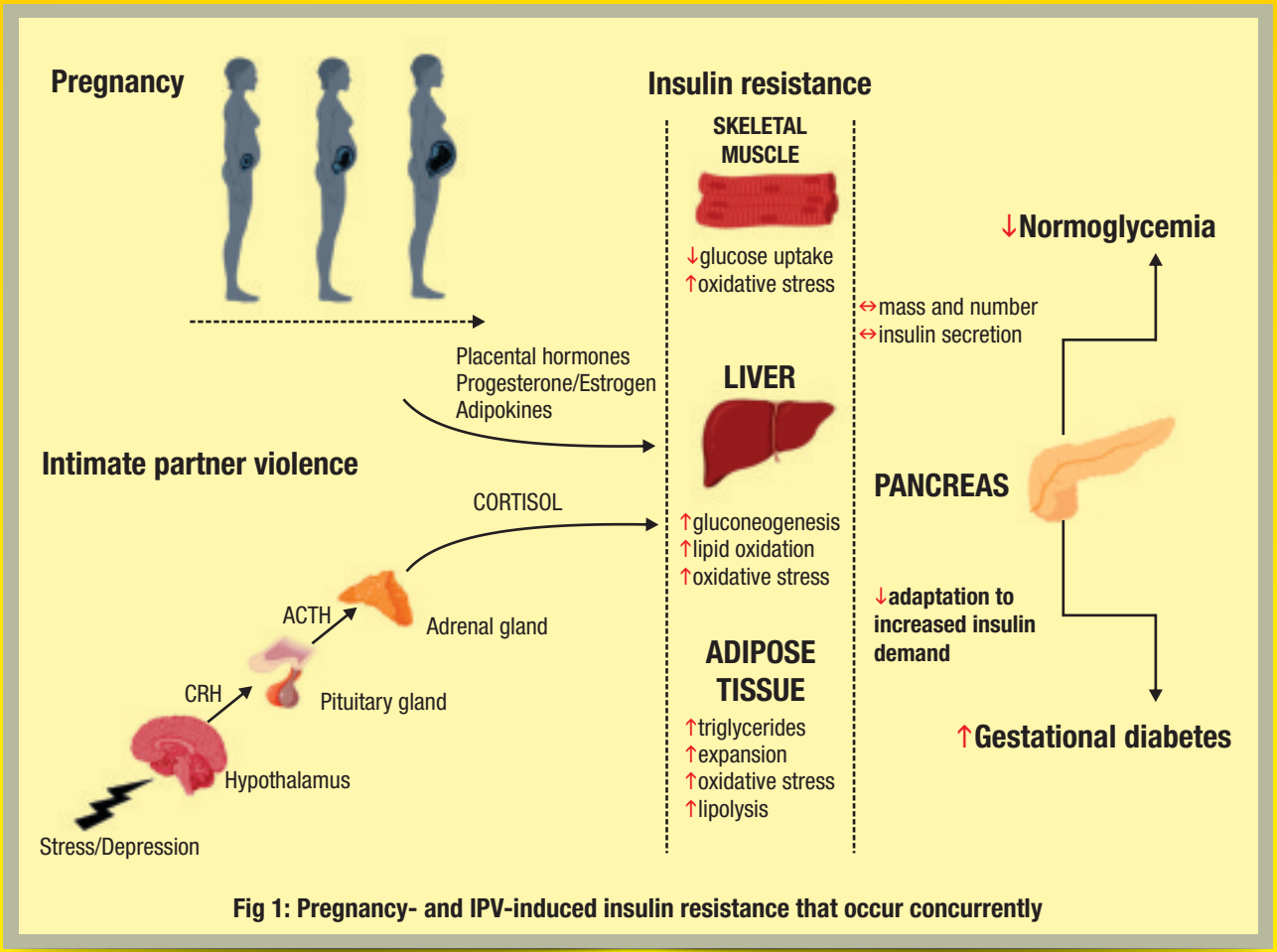

Fig 1: Pregnancy- and IPV-induced insulin resistance that occur concurrently

Type 2 diabetes mellitus

Individuals who have experienced IPV have been reported to have high circulating glucose levels. IPV may stimulate type 2 diabetes development through depression and/or through behavioural coping mechanisms that cause an increase in Body Mass Index (BMI). Depression is associated with central obesity and the potential for impaired glucose tolerance. Depression activates the hypothalamic-pituitary-adrenal axis, and pro-inflammatory cytokines, inducing insulin resistance and contributing to diabetes risk.

A recent study by Weitzman A. & Goosby B. et.al. (2020) revealed the increased probable prevalence of diabetes, heart diseases, thyroid and cancer in women who have experienced IPV. Analysis by Susan M et.al. 2013, estimated that exposure to physical, sexual, or psychological IPV contributed to ~6% of the type 2 diabetes incidence in the studied population. Therefore, IPV may have a significant influence on diabetes incidence and guidelines should encourage IPV screening in clinical care settings. IPV is preventable. Promoting healthy, courteous, and nonviolent relationships and communities can help reduce the occurrence of IPV. It will also prevent the harmful and long-lasting effects of IPV on individuals, families, and the community.

Stop before it starts	Example
Teach safe and healthy relationship skills	Support survivors to increase safety and lessen harm
Engage influential adults and peers	Create a protective environment (at home and community level)

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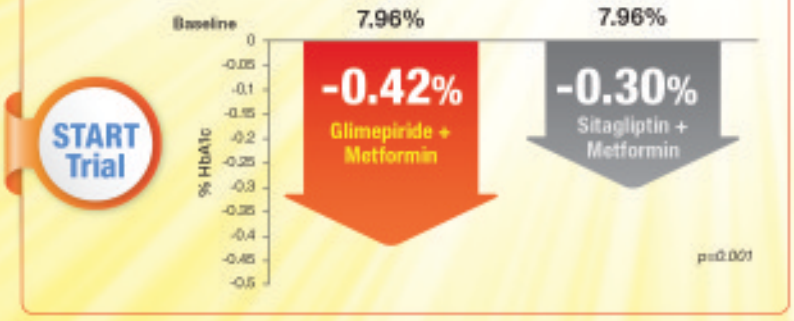
THE POWER OF BETTER HALF

Greater HbA1c reduction Vs Sita + Met[1]



Global Innovator
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100% Availability[3]

Well Established Safety & Tolerability[2]

1. Start trial- Gnanagiri TV et al., Indian J Endocrinol Metab. 2017 Sep-Oct; 21(5): 745–750.MLA. 2. Diabetes Obes Metab. 2017; 19:1189-1192. 3. Data on file.

Information
Metformin hydrochloride (as prolonged release) and glimepiride tablets
Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1 HS/ Glycomet-GP 2/ Glycomet-GP 2 HS/ Glycomet-GP 3/ Glycomet-GP 3 HS/ Glycomet-GP 4/ Glycomet-GP 4 HS/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte.

Abridged Prescribing Information

Composition: • Glycomet GP 0.5 mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 0.5 mg. • Glycomet GP 0.5 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release forms) 1000 mg and glimepiride IP 0.5 mg. • Glycomet GP 1: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2 HS: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg. • Glycomet GP 3: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release forms) 1000 mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. Initial dose: 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. Do not crush or chew the tablet. In several cases the tablet may remain intact during transit through the gastrointestinal (GI) tract and will be eliminated in feces as hydrated mass (ghost matrix). Patients should be advised that this is normal as all drug components have already been released during GI transit. **Contraindications:** In patients hypersensitive to glimepiride, other sulfonylureas, other sulfonamides, metformin or any of the excipients of Glycomet GP; pregnancy and lactation; diabetic ketoacidosis, diabetic pre-coma, in patients with eGFR<30 ml/min/ 1.73 m², acute conditions with the potential to alter renal function (dehydration, severe infection, shock, intravascular administration of iodinated contrast agents), acute or chronic disease which may cause tissue hypoxia (myocardial infarction, shock, cardiac/respiratory failure) hepatic insufficiency, acute alcohol intoxication, alcoholism. **Warnings:** Keep out of reach of children. Patient should be advised to report promptly exceptional stress situations (e.g. trauma, surgery, febrile infections). Blood glucose regulation may deteriorate and a temporary change to insulin may be necessary to maintain good metabolic control. In case of lactic acidosis, patient should be hospitalized immediately. **Precautions:** In the initial weeks of treatment, the risk of hypoglycemia may be increased and necessitates especially careful monitoring. Serum creatinine levels should be determined before initiating treatment and regularly thereafter: at least annually in patients with normal renal function. Intravascular contrast studies with iodinated materials can lead to acute alteration of renal function. In patients in whom such study is planned, Glycomet GP should be temporarily discontinued at the time of or prior to the procedure, and withheld for 48 hours subsequent to the procedure and reinstituted only after renal function has been re-evaluated and found to be normal. Use of Glycomet GP should be discontinued 48 hours before any surgical procedure. **Adverse reactions:** For glimepiride – hypoglycaemia; temporary visual impairment; GI symptoms like nausea, vomiting, abdominal pain, diarrhoea may occur; increased liver enzymes, cholestasis and jaundice may occur; allergic reactions may occur occasionally. For metformin – GI symptoms like nausea, vomiting, abdominal pain or discomfort may occur.

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Metformin Hydrochloride 1000 mg SR + Glimepiride 1/2/3/4 mg

Therapeutic Advances in Endocrinology & Metabolism

Meta-Analysis of 21 well established Trials

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BMI Reduced by 1.01 units

5% Weight loss vs Baseline body weight

High Dose Metformin improves Insulin sensitivity Vs Other OADs

FORte EVER

Source: 1. JAPI 2020 68.51.-55 2. Data on File, 3. Cureus 2020; 12(9): e10.7759/cureus.1070 4. Diabetes Technology & Therapeutics 2019..2,79-84 5. Kalra, et al.: Sulfonylurea and combinations: International Task Force Indian J Endocr Metab 2018;22:132-57.

Priscribing information

Information: Metformin hydrochloride (as prolonged release) and glimepiride tablets. Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1/850/ Glycomet-GP 2/ Glycomet-GP 2/850/ Glycomet-GP 3/ Glycomet-GP 3/850/ Glycomet-GP 4/ Glycomet-GP 4/850/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte Abridged Prescribing Information **Composition:** Glycomet GP 0.5mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500mg and glimepiride IP 0.5mg.• Glycomet GP 0.5 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 0.5mg.• Glycomet GP 1: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg.• Glycomet GP 3: Each uncoated tablet coetains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. **Initial dose:** 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. 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Effects of Hypoglycemia on Relationships

Dr. Ashish Goel

MBBS, PGD (Diabetes),
Consulting Diabetologist & Director, FAYTH clinic, Mumbai

People with diabetes, are known to experience "Diabetes Distress", due to various reasons, such as diet control, need for exercise, frequent monitoring, and majorly the 'fear' of hypoglycemia.

Hypoglycemia, till date remains a recurring hurdle in people with diabetes, despite the constant advances in insulin analogs, insulin pumps, and glucose monitoring devices. Worrying oneself with hypoglycemia is both reasonable and adaptive, since it keeps a person alert and responsive to hypoglycemic symptoms, allowing for prompt and adequate treatment. If these fears become excessive, they can have a significant detrimental influence on a person's quality of life and capacity to control their diabetes.

Hypoglycemia can disrupt relationships and social life

Hypoglycemic episodes can be frightening and can result in severe physical (loss of consciousness, seizure, and rarely, sudden death) as well as psychological (anxiety, confusion and depression) complications. It hampers an individual's day-to-day activities and is a major stress factor for both patients and family members.

Individuals with diabetes, no matter how enthusiastic they are about socializing and going out with friends, tend to avoid doing so due to the fear of hypoglycemia. At times, post a hypoglycemic episode, individuals find it difficult to speak and connect with others which leads to a feeling of embarrassment. They also feel restless and irritable, which can lead to conflicts or 'unfairly furious' behaviour toward their children/spouse.

Hypoglycemia and its precipitating effect on anxiety

Hypoglycemia may be significantly related to emotional and cognitive symptoms such as anxiety and difficulty concentrating. Generalized anxiety disorder (GAD) is a common and often disabling disease characterized by fear, tension, and excessive worries regarding common events or problems for a minimum of six months. It is further accompanied by symptoms such as heart palpitations, muscle tension, chest tightness, irritability and difficulty concentrating in addition to deterioration in the quality of their social work, and personal experiences. Dysfunctional neurotransmitter systems like serotonin and epinephrine are potentially involved in the development of GAD. It has been observed that hypoglycemia is associated with an acute increase in epinephrine, which contributes to neuropsychiatric symptoms including anxiety, and its accompanying symptoms - shaking, sweating and heart palpitations. Further Hypoglycemia symptoms like headaches, nausea and vomiting may add to the misery of the individual. All of this may resemble a Panic attack to the individual and impede their ability to function normally. Additionally, it may also be a source of discomfort for those around them – friends/family/colleagues.

Hypoglycaemia has an adverse impact on sleep

People with diabetes may suffer from a drop in blood sugar during sleep – Nocturnal Hypoglycemia. This may cause *nightmares, profuse sweating, crying or yelling during sleep and the feeling of generalised irritability upon waking.* Additionally, sleep-disordered breathing such as obstructive sleep apnea is associated with impaired blood sugar and obesity. All this has a detrimental effect on both the individual and their partner.

It is commonly observed that parents/partners of people with type 1 diabetes or newly diagnosed individuals with diabetes suffer from lack of sleep, as they are hyper-vigilant at night, in the fear that their partner/child would go into hypoglycemia.

The negative impact on their sleep cycle, causes them to be constantly exhausted both mentally and physically. According to a study it was observed that family members get disturbed at night and are unable to sleep due to the constant beeping sounds of different pumps/monitors at night, fearing that the individuals are experiencing a hypoglycemic attack.

Hypoglycemia and sexual health

Experiencing hypoglycemia before or during sexual activity leads to immense embarrassment in people with diabetes. They are worried about disappointing or frightening their partner, especially if they are in a new relationship or if their partner is unaware of hypoglycemia. Hypoglycemia in men typically leads to short-term, which leads to further embarrassment and feelings of anxiety. This leaves the individual with diabetes constantly stressed and this can hamper the sexual relationship with his/her partner.

Hypoglycemia and work relations

Hypoglycemia at work may negatively impact work performance. It becomes difficult to concentrate during a hypoglycemic episode. This can put stress on the relationship with the employer especially if work is regularly affected. Mood swings due to fluctuating blood glucose levels can further cause unreasonable conflicts with colleagues, thus straining workplace relations.

Hypoglycemia can be trying on relationships. It increases one's emotional response and can cause a dramatic change in character making him/her exceptionally angry, frightened or behave in a socially unacceptable manner. This may put the family/friend or colleague through an unpleasant situation. It is important that family members and close associates of the person having diabetes be educated well about the symptoms of hypoglycemia, and how to identify and treat it immediately to avoid said negative scenarios. Additionally, emphasis must be laid on the prevention of hypoglycemia for both individuals with diabetes, and his/her near dear ones. Hypoglycemic episodes can be handled easily and the individual returns back to normal once blood glucose is stabilized. Handling the situation with calm, patience and urgency is recommended. Such awareness and education help avoid difficult circumstances and lower fear of hypoglycemia among people with diabetes and their family members.

Resources:

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Workplace Support for Individuals with Diabetes

Dr. Nimish K. Patel

MBBS, MD Medicine, FICM

Consulting Physician & Diabetologist, Guru Ashish Clinic, Mumbai

Diabetes management requires a certain level of discipline and routine which can be easily managed if resources are provided and planned well in advance. Removing time for oneself to maintain the required discipline can be tiresome. Since a large part of the day is spent at the workplace, having supportive employers and colleagues can help an individual with diabetes perform his/her best at work without any hindrances. Here are some ways in which colleagues /employers can contribute to diabetes management.

Effective communication and support

Diabetes demands frequent monitoring of blood glucose levels and in some cases injecting insulin. Some individuals feel awkward and embarrassed about injecting insulin and/or checking blood glucose levels in front of others and may end up using the toilet to do so or avoid office social gatherings. Colleagues should reassure individuals with diabetes by asking if they need any support from them. Taking insulin or checking blood glucose levels is not something one should be embarrassed about. Colleagues can offer help to find an appropriate place for the same and put the person at ease. Some people with diabetes (PWD) are at risk of low blood glucose levels, especially when they are taking insulin. Associates should ask them which symptoms to look out for and what should be done if they ever need help treating a hypo.

Making reasonable adjustments

Employers should not discriminate against employees with diabetes from others, he/she should provide them with the needed support to be effective on the job while managing their condition. Reasonable adjustments can be done which don't necessarily have to cost money, it's more about having a flexible approach to work.

Some of these include making sure individuals with diabetes have breaks at set times to ensure optimal management of blood glucose levels. The employer must be flexible to allow regular health care appointments.

In case of ailments such as cold, flu or stomach infection, PWD may need to carry out extra blood glucose checks, prevent dehydration and manage what they eat more carefully. These individuals may need extra support from their healthcare team. Allowing them time to recover and providing flexible working options if appropriate can help them to work efficiently while being sick. Associates should also consider emotional well-being as stress may slow down their recovery even more and can affect their diabetes too.

Ensuring emotional wellbeing

Stressful situations at work, interviews, increased workload, the threat of termination and also raising blood glucose levels make it difficult to manage diabetes. It can lead to diabetes distress. The work environment should foster emotional well-being. An employee assistance program (EAP) can help PWD to feel motivated and can assist them in resolving challenges in self-care that may be adversely affecting the employee's performance.

Extra care during pregnancy

Chances of having a healthy baby are increased when pregnant women with diabetes receive extra support. Additional care is important at all stages of pregnancy. These women have more health check-ups and follow-ups. Some women develop diabetes during pregnancy termed gestational diabetes mellitus, which requires additional health care support. Hence, allowances like flexibility around working hours and some time off for appointments can help them take good care of themselves as needed and also be able to contribute to the workplace as expected.

Diabetes affects an organizations' health care costs along with productivity, hence supporting workers with diabetes is both the right thing to do and a rational business decision.

Including a component of health care awareness such as seminars on healthy eating, exercise, and emotional well-being in policies ensure optimal health of all employees. Interventions to tackle the sitting disease in the corporate work culture also benefits the employee's health. This will also help in reducing the development of diabetes in at-risk individuals, as early intervention saves lives.

Resources:

1. Supporting someone with diabetes at work, A guide for employers and colleagues, Available at: https://www.diabetes.org.uk/resources-s3/2019-10/supporting-someone-at-work_v7.pdf
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Caring for Elderly Parents with Diabetes

Dr. Harsha Pamnani

MBBS, MD Medicine (Gold Medalist), DNB Endocrinology

Consulting Endocrinologist, Siddhanta Red Cross Hospital, Bhopal

The elderly are one of the most vulnerable and high–risk groups in terms of healthcare, as they require frequent medical support and careful management.

The rising prevalence of diabetes among the elderly has become a serious socioeconomic burden. Diabetes affects a large percentage of the older population, and its consequences can have a significant impact on the elderly's quality of life. Caring for the elderly can be a challenging task; as there are specific precautions that must be taken, especially if the individual has diabetes.

Apart from diabetes, aging is usually associated with cognitive impairment, urinary incontinence and sarcopenia. However, elders with diabetes are also victims of macro vascular (cardiovascular diseases) and microvascular (retinopathy, nephropathy, and neuropathy) complications. This is where familial support, or caregivers comes into play. While diabetes self-care is critical in managing diabetes, support from family and especially one's own children is extremely important to encourage healthy habits and promote diabetes self-management.

While helping parents cope with diabetes management, one should always have an empathetic approach instead of a sympathetic one. Family members frequently have a substantial impact on a patient's psychological well-being, decision to follow medical treatment recommendations and initiation of dietary and exercise adjustments through their communications and attitudes.

Cognition and physical impairment

Elderly individuals with diabetes suffer from cognitive impairment, making them more vulnerable to hypoglycemic episodes. Over time, hypoglycemia symptoms become less specific as people age (e.g., feeling sick or dizzy), and some are mistaken for dementia symptoms (e.g., agitation or confusion).

Patients with cognitive impairment sometimes forget to take insulin dosages, medications, or insulin on time, or they may fail to eat on time. This could lead to a number of problems, hypoglycaemia being the most prominent. To avoid such complications, family members/children must help the elderly by supervising them while they take their medications or insulin dosage. Their diet and blood glucose readings need to be monitored. A continuous glucose monitoring device can be of help both to the elderly as well as their caregivers/children.

Furthermore, in elderly adults, alongside cognitive impairment, frailty and sarcopenia are commonly seen. Older adults, are more prone to falls and are more likely to sustain fractures. This also leads to a feeling of nervousness and embarrassment. Thus, accompanying elders to their doctor's appointments lowers the occurrence of such falls and is also a source of moral support.

Foot care and eye care

Diabetes generates a variety of microvascular problems that often affect the foot and eye. Elders with diabetes are at a higher risk of contracting a foot infection. Fungal infections, blisters, ingrown toenails, corns and other foot issues are common among people with diabetes. There is delayed wound healing, due to inadequate blood flow and damaged foot muscles or nerves, which can impair foot alignment, putting greater pressure on the foot and increasing the risk of foot sores and ulcers. These need to be diagnosed and treated early to prevent further complications. Daily examination of the foot for any changes or discolouration is critical. This may be a challenge for old people to check their feet by themselves. Here the caregivers/children can volunteer to check their feet for any changes and accompany them to the podiatrist if needed.

Most elder vision is affected by ageing, but diabetes can cause a more serious vision issue called diabetic retinopathy. This is when high glucose levels cause damage to blood vessels in the retina. It could lead to loss of vision. This impacts the quality of life of the elderly. Thus the children/caregivers must accompany them for a dilated eye exam at least once a year. Also if there are already some vision difficulties they must help them with tasks like reading the glucometer and setting the right dose of insulin in the syringe/pen.

Diet & exercise in diabetes

In diabetes, nutrition and physical activity are critical components of a healthy lifestyle. Following a nutritious diet plan and staying active help to keep the blood glucose level, within the desired range.

Thus, family members/ caregivers must ensure that the elderly individuals are following a healthy lifestyle by incorporating it into the whole household instead of only expecting the elderly individual to follow. They can be exercise partners to their old parents and can make sure that the meals cooked at home are healthy, nutritious and wholesome so that all members of the family can live a healthy lifestyle which will eventually help in the diabetes management of the elderly.

Elderly individuals tend to feel lonely, so frequent communication with them will help in motivating them for self-care. Like every - one they too need to be felt loved. After all old age is second childhood.

Resources:

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Diabetes Educator Tip of the Month

Contributed by
Name: Prapti Shah

Qualifications: PG in Clinical Nutrition and Dietetics specialised in Renal Nutrition

Tips for parenting a child with diabetes

Managing diabetes as per the guidelines offered by the American Diabetes Association and health care teams places a high liability on parents. The burden of T1D management to check young children's blood glucose levels, administer insulin, monitor diet and physical activity with the ultimate goal of maintaining a tight glycemic control likely contributes to a parent's stress. Below are a few tips for parenting a child with diabetes:

- Be attentive towards their feelings as whatever the child might be feeling, the parents can help by teaching the child to have a sense of control over their condition. Parents tend to get overprotective after the diagnosis, however by getting the child involved in diabetes management, parents can remain protective of their child whilst encouraging self-reliance and increased self-esteem in their child.
- Along with encouraging children to learn management skills, so eventually they can become skilled at self-care they should also be encouraged to tell and teach their friends about their diabetes so as what to do in the case of hypoglycemia.
- Parents should help children learn to manage their diabetes by establishing a routine of eating meals at the same time daily, avoiding skipping meals and healthy snacking before going for physical activity or play. Informing the school staff about the child's diabetes should help to guarantee that they stick to their management.
- Attending a diabetes camp and meeting other children with diabetes often has a positive effect which can encourage children to undertake tasks they might have previously avoided like administering insulin by themselves.

- Making a teenager understand their metabolism is crucial as during puberty and growth spurt there are erratic blood glucose levels. It is necessary to encourage them to accept that less tightly controlled blood glucose is okay and that is not a reason to give up trying to control it.
- By understanding a teenager's lifestyle and peer pressure, parents can help them realise they can have an enjoyable social life too by staying within healthy limits and being disciplined about their diabetes and also be realistic to seek help if they need it.

Resources:

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2. Ambler G, Cameron F. Caring For Diabetes In Children And Adolescents. 3rd ed. Australia: Blue Star Print Group; 2010:14-16.
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Superfood: Little Millet

Little millet (Samai Rice - *Panicum sumaretse*) is also known as Indian Millet, Tribal Millet, 'King Of Cereals' and is consumed more by the tribals. It is mainly grown in East Asia, China, India, Malaysia and Caucasus. Samai has medicinal properties and is a good source of nutrients too.

Nutritional Facts

- Low GI (Glycemic Index)
- High fibre
- Bioactive compounds
- Gluten-free

Health Benefits

Anti-oxidant property: Little millet has antioxidants like polyphenols, phenolic compounds, tannins and flavonoids which help in combating lifestyle diseases, delay ageing, reduce the risk of metabolic syndrome and improve the immune system.

Diabetes management

Resistant starch formation in millets along with high fibre slows starch hydrolysis, thus helping regularise blood glucose levels. Presence of high dietary fibre – non-starch polysaccharides in millets compared to wheat and rice lowers enzyme activities in the gut and lowers the absorption of mono and disaccharides and delays absorption of starchy polysaccharides thereby exhibiting low GI.

Cardiovascular benefits

It is an excellent source of magnesium which helps in maintaining blood pressure levels and maintains heart rate.

Cataract genesis inhibition

An enzyme in little millets -aldose reductase helps to reduce the risk of cataracts.

Some of the excellent health benefits of little millets such as being an antioxidant, useful in diabetes management, cardio-protective and cataract genesis inhibition, make it an excellent food choice for people with diabetes as well as for the elderly people.

How to consume?

Various recipes are made from millets in India, such as roti, upma, idli, dosa, khichdi, noodles, porridge, adai, vada, flakes, upma etc. This millet is consumed mainly during Hindu fasts.

Recommended intake

One exchange of little millet which equals 30g will give 20g of carbohydrates, 3g of proteins, 1g of fat and an energy of 100 Kcal.

Resources:

1. K.Indirani ,M.Devasena. Review on Nutritional Profiles and Health Benefits of Little Millets –India. IJRES-2021: Volume 09 Issue 11. PP. 07-11
2. Anitha S, Kane-Potaka J, Tsusaka TW, *et al.* A Systematic Review and Meta-Analysis of the Potential of Millets for Managing and Reducing the Risk of Developing Diabetes Mellitus. *Front Nutr.* 2021;8:687428. Published 2021 Jul 28. doi:10.3389/fnut.2021.687428

Recipe: Little Millet Upma

Serves: 2

Ingredients	Amounts
Little millet	½ cup
Onion (small)	1 no.
Tomato (small)	1 no.
Cumin seeds	1/4th tsp.
Green Chili	1 no.
Finely chopped onion	1 no.
Ginger	½ inch finely chopped
Curry leaves	4 no.
Diced carrots	¼ cup
Cabbage	¼ cup
Capsicum	¼ cup
Boiled green peas	½ cup
Udad dal	½ tsp
Chana dal	½ tsp
Finely chopped coriander leaves	For garnishing
Salt	to taste
Oil	1 tsp

1 cup: 250 ml; 1 tablespoon: 15ml; 1 teaspoon: 5ml

Method

1. Wash the millet and keep it aside.
2. In a large pan, heat oil and temper with cumin seeds, udad dal and chana dal. Once it splutters, add green chilli, onions, ginger and curry leaves.
3. Once the onion turns translucent, add tomato, carrots, peas, cabbage and capsicum Mix well and cook for a few minutes.
4. Add the little millet, and sauté it for a few seconds. Pour 4 cups of water, add salt and bring it to a boil. Simmer it for about 15 minutes or till water is absorbed and little millet is cooked. (If pressure cooked it requires 3 whistles)
5. Serve hot and garnish it with coriander leaves.

Dia-Games

Choose the correct answer

Given below are a few situations. Choose the correct reactions for the same

1. Your friend suffers from diabetes and needs to inject insulin before he eats. Some of your other classmates, tease and ridicule him about the same. What would your reaction be?
   a. Laugh and ridicule him along with the others
   b. Support him by standing up for him and helping him whenever possible
   c. Ignore the situation and go on with your daily work
2. You are caring for your child who has type 1 diabetes. He is invited to his best friend's birthday party. You should:
   a. Allow him to go but instruct him not to eat cake and snacks there
   b. Tell him not to go as his sugars will go high
   c. Allow him to go and talk to the best friend's parents to keep a watch for any alarming signs
3. In a family, one sibling has diabetes and is encouraged to eat healthy foods. The other sibling frequently orders from out. This causes the sibling with diabetes to feel left out. What should the parents do?
   a. Make the siblings sit in separate rooms while eating
   b. Order different food items for both the children
   c. Encourage both to eat the same homemade healthy food with once in a while indulgence from out.
4. You're newly married and your partner is diagnosed with diabetes. What would you do in a situation like this?
   a. Get angry and break off the marriage
   b. Accept the situation and get yourself educated about diabetes and learn ways to support him/her
   c. Let the partner deal with it.
5. You're a 69-year-old father-in-law suffering from diabetes, who finds it difficult to chew his food, which causes him to skip meals and frequently goes into hypoglycemia. This causes you a lot of stress. What would you do in this situation?
   a. Stop giving him his medications so that he does not go into hypoglycemia
   b. Visit a nutritionist to get ideas on how to tackle this situation and ensure balanced intake and prevent hypoglycemia
   c. Keep him on a liquid diet.

Answers
1-b, 2-c, 3-c, 4-b, 5-b

Patient Speaks

My daughter Sheena is 15 years old now and was diagnosed with type 1 diabetes at the age of 10 years. Initially, I was very scared as we were completely clueless about how to manage this condition. As a family, we realised that we needed to make changes but were unsure of how to go about the same. With so much information coming to us from different avenues it was a shaky start.

We had to learn all about insulin and the types of insulin (basal & bolus), how to check her blood glucose levels and monitor the same. We learnt about hypoglycemia and how to tackle the same. We learnt that her dietary needs were going to need more understanding and monitoring. With her going to school and for other activities we realized that planning was important. Initially, I was very overprotective and refused to allow her to join or go for a lot of activities or events like birthdays, sleepovers, etc. unless I could be present there with her. When going on trips I would get paranoid and hold her back from enjoying many outdoor activities and her favourite foods. This led to a lot of disagreements and rebellious behaviour.

I approached my DE who then intervened and explained to me that this was not ideal behaviour. She advised us to visit a qualified dietitian to get the guidance we needed as far as a healthy diet is concerned. She asked us to be more open and to share my daughter's condition with a few key people (like friends, teachers, neighbours) so that they would be in a position to help in case of an emergency. She explained that I needed to make my daughter more responsible for managing her condition and to give her the opportunity to learn how to self-manage. She counselled my daughter and guided her on the importance of monitoring her blood glucose levels. She gave her tips on how to manage episodes of hypoglycemia and advised us to always keep a Hypo kit ready. Once my daughter got more confidence in successfully managing her condition the hypo episodes reduced drastically which in turn made me less anxious. The environment at home changed and became less stressful and happier. We had fewer arguments and my daughter enjoyed her newfound freedom.

With the help of our DE, we realized that our change in attitude and behaviour as parents made a huge difference in the way she looked at diabetes. We stopped over-reacting on every sugar reading and started supporting her to get it to the target levels. We accepted the fact that there will be good and bad days and this acceptance helped our daughter manage her condition better. To date, we stand by her as her pillars of support and never hold her back for anything but help her plan her food/activities/routines better.

NOTES

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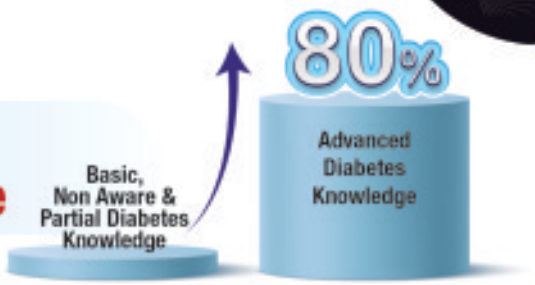
Beat Diabetes Win Life

Published in D-TechCon

D-TechCon World Congress OF DIABETES TECHNOLOGY

For all your new & existing people with diabetes

Diabetes Knowledge Improvement with this course



Diabetes Education Certificate Course In your name

Simple & easy steps for patients

- Scan QR
- Choose from 12 languages
- Access course (12 Modules)

12 Must to know topics

- Basics of Blood Sugar
- Understanding High Blood Sugar
- Blood sugar monitoring
- Know your Risk
- Heart & Kidney link
- Diabetes & footcare
- Diabetes & Eyes
- High Blood sugar & Immunity
- Medication adherence
- Self management of Blood sugar
- Safe feasting & fasting
- Healthy habits

Well informed adherent patients

- Patients to give tests to check their knowledge on each
- Reports are visible in dashboard
- Certificates and badges will be sent on your behalf

An awareness initiative by USV

Ref.: Dr rajeev chawla et al, World congress of diabetes technology 2022.

In T2DM Across Continum,

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Metformin Hydrochloride 500 mg SR + Glimepiride 1/2 mg

Source: 1. JAPI 2020 68,51.-55 2. Data on File, 3. Cureus 2020; 12(9): e10.7759/cureus.1070 4. Diabetes Technology & Therapeutics 2019,.2,79-84 5. Kalra, et al.: Sulfonylurea and combinations: International Task Force Indian J Endocr Metab 2018;22:132-57.

Priscribing information

Information: Metformin hydrochloride (as prolonged release) and glimepiride tablets. Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1/850/ Glycomet-GP 2/ Glycomet-GP 2/850/ Glycomet-GP 3/ Glycomet-GP 3/850/ Glycomet-GP 4/ Glycomet-GP 4/850/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte Abridged Prescribing Information **Composition:** Glycomet GP 0.5mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500mg and glimepiride IP 0.5mg.• Glycomet GP 0.5 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 0.5mg.• Glycomet GP 1: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg.• Glycomet GP 3: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. **Initial dose:** 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. Do not crush or chew the tablet. In several cases the tablet may remain intact during transit through the gastrointestinal (GI) tract and will be eliminated in feces as hydrated mass (ghost matrix). Patients should be advised that this is normal as all drug components have already been released during GI transit. **Contraindications:** In patients hypersensitive to glimepiride, other sulfonylureas, other sulfonamides, metformin or any of the excipients of Glycomet GP; pregnancy and lactation; diabetic ketoacidosis, diabetic pre-coma, in patients with eGFR<30 ml/min/ 1.73 m2, acute conditions with the potential to alter renal function (dehydration, severe infection, shock, intravascular administration of iodinated contrast agents), acute or chronic disease which may cause tissue hypoxia (myocardial infarction, shock, cardiac/respiratory failure) hepatic insufficiency, acute alcohol intoxication, alcoholism. **Warnings:** Keep out of reach of children. Patient should be advised to report promptly exceptional stress situations (e.g. trauma, surgery, febrile infections). Blood glucose regulation may deteriorate and a temporary change to insulin may be necessary to maintain good metabolic control. In case of lactic acidosis, patient should be hospitalized immediately. **Precautions:** In the initial weeks of treatment, the risk of hypoglycemia may be increased and necessitates especially careful monitoring. Serum creatinine levels should be determined before initiating treatment and regularly thereafter: at least annually in patients with normal renal function. Intravascular contrast studies with iodinated materials can lead to acute alteration of renal function. In patients in whom such study is planned, Glycomet GP should be temporarily discontinued at the time of or prior to the procedure, and withheld for 48 hours subsequent to the procedure and reinstituted only after renal function has been re-evaluated and found to be normal. Use of Glycomet GP should be discontinued 48 hours before any surgical procedure. **Adverse reactions:** For glimepiride - hypoglycaemia; temporary visual impairment; GI symptoms like nausea, vomiting, abdominal pain, diarrhoea may occur; increased liver enzymes, cholestasis and jaundice may occur; allergic reactions may occur occasionally. For metformin – GI symptoms like nausea, vomiting, abdominal pain or discomfort may occur.

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