**Timely insulin use: Need for social marketing**

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**Introduction**

Data from across the world reflects the increasing prevalence of type 2 diabetes mellitus. With figures of estimates rising by the year, it is clear that diabetes will remain endemic to almost all human societies for generations to come.[1] While the prevalence of diabetes has risen, so has our capability to fight the disease. Our understanding of the pathophysiology has increased, as has the variety of drugs available to counteract this pathology.[2] Advances in monitoring technology, drug development, and delivery devices have meant that safe and effective pharmacotherapy is now available for the vast majority of people with diabetes.

**Ground Reality**

Sadly, however, this has not translated into a visible improvement in outcomes. The number of persons who are diagnosed in time, treated in time, and who achieve appropriate therapeutic goals, remains unacceptably low. Taking “the rule of halves” as a guide, perhaps just one out of eight individuals with diabetes achieve HbA1c targets.[3]

The basic barriers to good glucose control can be traced to unhealthy behavior, attitude, or practices. Most discussion about these issues focuses on lifestyle, including nutrition, physical activity, and stress management. Relatively less emphasis is laid on pharmacological management and its relationship to behavior or attitudes. This is surprising, as it is well-documented that lifestyle modification alone does not suffice, and that the majority of people with diabetes will need drug therapy including insulin, at some time.[4] One of the reasons for poor control is poor health care seeking behavior, coupled with suboptimal health care accepting behavior, i.e., adherence. Clinical inertia related to acceptance of appropriate modern pharmacotherapy is well-documented in diabetes literature. This is especially true for injectable therapy, specifically insulin.[5] Various barriers have been identified which prevent timely insulin initiation and intensification, including patient-centered, physician-driven, and system related issues. Working in tandem with each other, these obstacles prevent achievement of good glycemic control and lead to a multitude of complications related to uncontrolled hyperglycemia. Delayed initiation or intensification of insulin also associated with higher long-term medical costs and a greater economic burden on society.[6]

**Social Reality**

The concept of social pharmacology is also well-described,[7] and has been suggested to be a patient-centered, or person-centered framework as opposed to a drug oriented one.[8] This science is extremely important for a chronic condition such as diabetes, which impacts virtually every aspect of social life, including food, exercise, and interpersonal relationships. It is not surprising that diabetes has been termed a family disease or a community illness,[9] and that the family is taken as an integral part in the fight against diabetes.[10]

Extending this train of thoughts, it can be assumed that the family or community should be targeted to ensure better health care seeking and accepting behavior, including use of glucose-lowering drugs like insulin. This can be achieved by systematic and scientific social marketing.

**Social Marketing**

The term social marketing was coined by Kotler and Zaltman,[11] who used it to describe the design, implementation, and control of programs calculated to influence the acceptability of social ideas, and involving considerations of product planning, pricing,
communication, distribution, and marketing research. Social marketing keeps “social good” as a primary aim and does not focus on commercial or financial gains.

India has been a trailblazer in the use of marketing techniques in public health. The first documented use of modern marketing strategies to achieve social good is from Calcutta, where Chandy et al. proposed and implemented a national family planning program, which encouraged the use of low-cost good quality barrier contraceptives, supporting it with an integrated consumer and retailer marketing campaign. Other countries, including both developed and developing nations, followed suit, with active government backing in many cases.

**Social Marketing of Insulin**

Keeping view the social ramifications of diabetes, it makes sense to coopt social marketing as a strategic tool to help promote healthy diabetes care related behaviour. This has been done, with mixed results, in relationship to nonpharmacological or lifestyle-related behaviors. Half a century after India reported the successful use of social marketing in public health, this editorial focuses on similar interventions that may be feasible and useful in helping timely initiation and intensification of insulin therapy. We hope that a step-wise approach to this topic will help convergence and concordance of like-minded stakeholders, who aim to achieve a simple goal: Good glycemic control, and optimal health, for people living with diabetes.

As social marketing attempts to achieve behavior change, a focus on improving health care seeking behavior, with an emphasis on timely insulin acceptance and usage, may be considered part of social marketing. As the final goal of social marketing is societal good, (good glycemic control and complication-free diabetes, in this case), timely use of insulin (which helps achieve this goal) can be considered an apt social marketing intervention. This firmly places it alongside other socially appropriate interventions such as lifestyle change, encouragement of exercise, and healthy eating habits, which seek to achieve the same goal.

Social marketing should be differentiated from routine marketing strategies meant to promote specific services and organizational aims. For example, a sustained campaign to encourage timely insulin usage, without mentioning brand names or products, may be considered social marketing, while a drive to increase sales of a particular drug cannot be discussed under this umbrella.

Critics may disparage this argument, pointing to the “pharmaceutical” nature of insulin, and the profit orientation of insulin manufacturers. It must be noted, however, that “classic” social marketing campaigns have promoted pharmaceutical interventions (oral contraceptives, vaccines, oral rehydration solution, nicotine substitutes) and for-profit products (condoms, helmets) without facing such criticism. Insulin use, therefore, can be promoted as a part of social marketing.

**Social Marketing Assessment and Response Tool Social Marketing of Insulin**

A well-designed tool, the social marketing assessment and response tool (SMART) has been developed to help systematic study of various social marketing interventions in this regard. The SMART lists various steps involved in creating an effective social marketing intervention. It is ironic that while all required information and while all required information and knowledge is available regarding timely insulin use, the barriers opposed to it, and its advantages, this has not been collected and utilized for purposes of social marketing so far.

The first step in crafting a social marketing strategy is preliminary planning. In the case of insulin therapy, our problem of interest is a lack of timely initiation and intensification. If we agree upon this, our general goal is to enhance or support timely acceptance of insulin therapy.

This brings us to the next steps in SMART, which together are termed as formative research. Formative research includes identification of the wants and needs of the target audience, and factors that influence, its behavior. To do this, one first needs to understand the target audience. If diabetes care is teamwork, so is insulin use. The health care professional, the person, living with diabetes, the person living with diabetes, the family, and the community at large, all play an important role in insulin use. This implies that social marketing campaigns must be aimed at all these stakeholders, viz., health care professionals, persons living with diabetes, their families, and their communities.

Channel analysis, the next step, involves identification of preferred communication methods used by the intended audience, with an assessment of their relative importance and influence. Channels may include mass media, such as television, radio, print publications; online media, including internet, blogs and twitter accounts, and focused channels, like professional journals or patient support groups.

Market analysis is an important step in planning a social marketing campaign. This encompasses identification of partners, allies, competitors and “foes” working in
the same arena. Examples of partners and allies include organizations working for general health promotion, healthy lifestyle, healthy environment, early diagnosis of diabetes and its complications, and optimal glucose monitoring. Competition may refer to schools of thought which promote the use of alternatives to insulin, such as quadruple oral combination therapy, even in persons with poorly controlled HbA1c. The term “foe” may be used to describe players who defend and propagate unvalidated, unscientific approaches to the management of diabetes, viz unproven alternative or complementary systems of medical care, which lack robust evidence-based support.

### The Four P Marketing Mix

Once friends and foes are recognized, market analysis emphasizes preparation of the right “marketing mix” of 4 Ps (product, price, place, and promotion). It must be noted here that the price paid by an insulin user (i.e., consumer) is often intangible in nature, and must be given due weightage. The 4 P marketing mix should be able to weigh the price against the perceived value of the product, and create a favourable cost: benefit ratio for insulin use. The promotional strategies and material should be chosen with care, as should the place (target) for intervention.

While our product is straightforward (timely use of insulin), the intangible or nonfinancial price paid for insulin adoption must be explored in detail. This may include time spent in attending continuing medical education, and time spent in counseling patients, for the healthcare professional. For the patient, insulin use may imply loss of flexibility and freedom in lifestyle and acceptance of intrusion into one’s preferred lifestyle. The family may feel it has to pay a price by restricting social activities such as travel and leisure, or by changing dietary patterns. The community or society, too, shares a part of the price as it meets its obligation of providing a diabetes-friendly environment. Such discussion overlaps the field of health economics, which is gaining importance in the context of diabetes care.

A complete formative analysis or research is followed by development. This is not a one-time affair. Rather, it is a continuous activity, with ongoing evaluation, and frequent midstream correction or modification. Once the final product (strategies, tactics, and methods) is ready, it is ready for implementation or activation. Implementation should be accompanied by monitoring, using various validated or pretested means of assessment. The 4 Ps, as applied to insulin initiation and intensification are listed in Table 1.

### Best Practices

The social marketing of diabetes care received a much-needed and well-deserved fillip, when the World Health Organization and International Diabetes Federation declared November 14 as World Diabetes Day, to be celebrated globally. This year the World Health Organization has helped the diabetes social marketing movement by choosing diabetes as its focus for World Health Day (7 April), with the theme Beat Diabetes.

For the past few years, Injection Technique Day has been celebrated on 11 January, to commemorate the first insulin dose administered by Dr. Ed Jeffery to Leonard Thompson in Toronto. The week from 11 to 17 January is observed as Injection Technique week.

Various celebrities, such as Wasim Akram and Sachin Tendulkar have lent their voice to social marketing campaigns in the recent past. Most of these campaigns, however, are run by private firms and organizations. This is in sharp contrast to social marketing policies for other public health issues, such as immunization, sanitation, and

| Table 1: The Social marketing mix for insulin |
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| **P** | Definition | Insulin use | Comments |
| **Product** | Idea/behavior/service/tangible item | Timely insulin initiation/intensification | This requires prescription Acceptance, Adherence, Persistence |
| **Price** | Psychological tangible price to pay for product adoption | Fear of injection, Fear of hypoglycemia, weight gain, Fear of inability to handle insulin administration monitoring adverse events, Fear of family reaction, Fear of social ostracization | This requires marketing of the benefits of insulin, and reassurance that the fears are unfounded |
| **Place** | Where consumers are exposed to communication/receive product | All persons with diabetes, All family members, All healthcare settings, All health care portals/channels | While the main place is the diabetes care setting, premarketing and postmarketing is universal |
| **Promotion** | Means of communication of message to target audience | Mass media person to person community-based | This requires multiple channels, focusing on multiple targets |
maternal health, where the government takes a proactive role in spreading awareness and encouraging healthy behaviors.

A public-private partnership already exists in India, with regards to diabetes care, especially insulin usage. Examples include the Changing Diabetes Barometer and Changing Diabetes in Children project, which are running successfully in many states of the country. The Public Health Foundation of India has tied up with state governments (West Bengal and Madhya Pradesh) to train public sector doctors in diabetes care. Their comprehensive programs include a detailed discussion on insulin therapy and facilitate timely usage of this treatment modality.

**SUMMARY**

Such public-private partnerships should be strengthened, and a concerted, nation wide social marketing policy created to enhance insulin usage. Awareness about the science and art of social marketing should be coupled with knowledge of the art and science of insulin use. Working as a team, social marketeers and diabetes care professionals should be able to achieve timelier acceptance and usage of insulin, thus allowing more persons with diabetes to benefit from advances in therapy.

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